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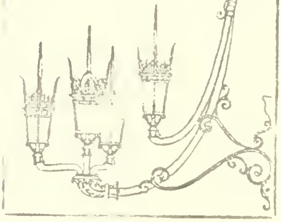

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BOSTON MASS.

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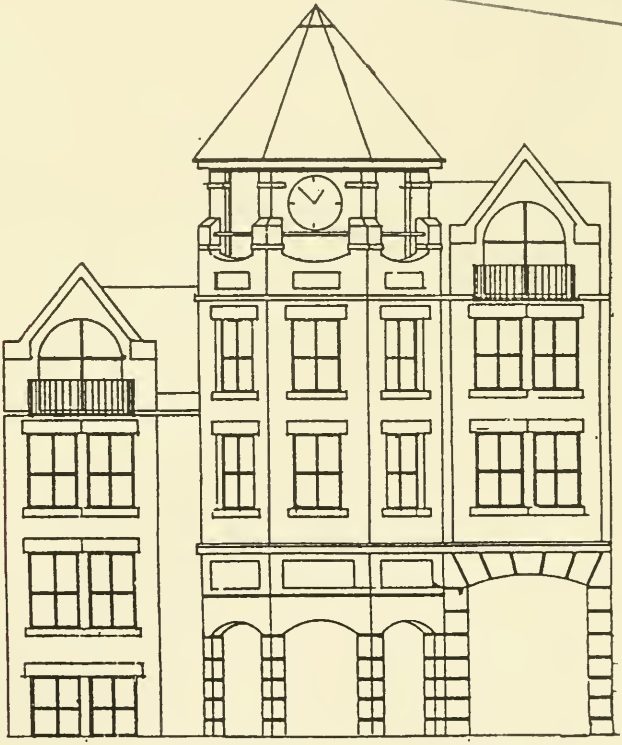

Submitted by

Renaissance Properties
321 Columbus Avenue
Boston, Mass. 02116

December, 1987

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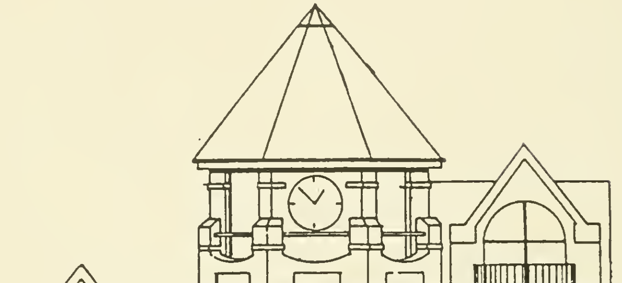

Submitted by

enaissance Properties
1 Columbus Avenue
ston, Mass. 02116

December, 1987

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I. SUMMARY

I. SUMMARY - 32 GARRISON STREET

A. Introduction

The 32 Garrison Steet project analyzed in this document, proposes the new construction of 74 residential units, and a below grade garage to accommodate 74 cars.

This Draft Project Impact Report, prepared for the Boston Redevelopment Authority (BRA), presents the current plans for the 32 Garrison Street site and discusses the possible effects of its construction and completion on the area´s environment and historical character.

This first chapter includes both applicant and property information. Chapter II, Project Design, presents a detailed description of the project design and the surrounding area context. Chapter III is made up of three subsections that discuss environmental analyses on transportation, shadow, and construction. Chapter IV details the neighborhood review process, and the public benefits resultant from the construction of 32 Garrison Street. Chapter V evaluates the project from an historic perspective, and Chapter VI itemizes the zoning relief, variances, and permitting/approval process relevant to this development. Appendices with relevant plans, elevations and renderings, as well as geotechnical information follow.

B. Project History

To begin the city approval process under the proposed development review requirements (Article 31) to the Boston Zoning Code, a Project Notification Form (PNF) must be filed with the BRA (see Appendix A). In response to the PNF, the BRA issues a scoping determination that outlines the information to be presented in the Draft Project Impact Report (see Appendix B).

C. Development Team

DEVELOPER:

Renaissance Properties, Inc.
321 Columbus Avenue
Boston, MA 02116
(617)536-2700

Contact: Elizabeth Mcloughlin

PRINCIPALS:

Roger E. Tackeff
121 West Newton Street
Boston, MA 02118
(617)262-1712

Michael A. Leabman
163 Appleton Street
Boston, MA 02116
(617)451-1916

LEGAL COUNSEL:

Choate, Hall & Stewart
53 State Street
Boston, MA 02109
(617)227-5020

Contact: Elizabeth Gerlach

ARCHITECT:

Notter, Finegold & Alexander
77 North Washington Street
Boston, MA 02114
(617)227-9272

Contact: James Monteverde

PROJECT CONSULTANTS:

Hidell-Eyster
Box 325
Accord, MA 02018
(617)749-8040

Contact: Theresa Kennedy

STRUCTURAL ENGINEER:

Aberjona Engineering, Inc.
One Mount Vernon Street
Winchester, MA 01890
(617)729-6188

Contact: Dave Bacon

MECHANICAL ENGINEER: Environmental Design Engineers
145 Portland Street
Boston, MA 02114
(617)742-7434

Contact: Dan Levinson
John Hayes

ELECTRICAL ENGINEERS: Vincent DiIorio, Inc.
116 South Street
Boston, MA 02111
(617)542-5230

Contact: Vincent DiIorio
Fred Bark

GEOTECHNICAL ENGINEERS: Geotechnical Engineers, Inc.
1021 Main Street
Winchester, MA 01890
(617)721-4000

Contact: Sam Liao

D. Legal Information: There are no judgements or actions pending against the developer, nor are any of the developer's properties in tax arrears.

E. Development Ownership

Area properties currently or formerly owned by the developer include, but are not limited to the following:

5-7-9 Albemarle Street, Boston, MA	15 units
42-44 St. Botolph Street, Boston, MA	16 units
743 East Fourth St., So. Boston, MA	19 units
350 West Fourth St., So. Boston, MA	47 units
16 Harcourt Street, Boston, MA	9 units
Dartmouth Square, Boston, MA	60 units
84 Appleton Street, Boston, MA	5 units
51-53 Clarendon St. Boston, MA	6 units
50 Berkeley Street, Boston, MA	9 units
321 Columbus Avenue, Boston, MA	7 units
The Kearsarge House, Portsmouth, NH	12 units
2 Clarendon Street, Boston, MA	60 units
4-18 Clarendon Street/72 Warren Avenue, Boston, MA	30 units

F. Financial Information

BANK REFERENCES

Bank of Boston
100 Federal Street
Boston, MA
(617)434-2200

Contact: John DeCamp

Bank of New England
28 State Street
Boston, MA
(617)742-4000

Contact: Mark C. Hargrave, III

G. Property Agreements

Purchase & Sale Agreement, dated January, 1987, between the First Church of Christ, Scientist, in Boston Massachusetts as seller, and Roger E. Tackeff and Michael A Leabman as buyer trustees of 32 Garrison Street Realty Trust.

H. Development & Operating Proformas

Final construction estimates and, therefore, development proformas, are contingent upon final bids received from subcontractors. We expect numbers which reflect an 80-90 percent confidence level to be finalized during the month of January.

I. Legal Description of Project

A certain parcel of land with the buildings thereon situated in Boston, Suffolk County, Massachusetts, being shown on a plan made by Aspinwall & Lincoln, C.E., dated August 20, 1931, recorded with Suffolk Deeds on September, 11, 1931. Said parcel is bounded and described as follows:

Northwesterly	by the southeasterly end of Garrison Street and and by the southeasterly line of Alley No. 454 as shown on said plan, one hundred seventy-eight and 71/100 (178.71) feet;
Southwesterly	by the northeasterly line of a passageway shown on said plan, one hundred sixty-four (164) feet;
Southeasterly	by land of the Boston and Providence Railroad Corporation, one hundred seventy-eight and 95/100 (178.95) feet;
Northeasterly	by land designated on said plan as land now or formerly of F.H. Roberts Co., being land now of A.W. Perry, Inc., in part running through the middle of a sixteen (16) inch wall as shown on said plan, sixty-seven and 76/100 (67.76) feet;
Northwesterly	by said last mentioned land, thirty-one one hundredths (.31) of a foot;
Northeasterly	by said last mentioned land on a line running through the middle of a twenty (20) inch wall and continuing to the end of said Garrison Street as shown on said plan, ninety-six and 24/100 (96.24) feet.

Containing 29,328 square feet according to said plan.

II. PROJECT DESIGN

II. PROJECT DESIGN

A. Introduction

This chapter describes the proposed project design through text and graphics. The project scheme on which this document is based evolved over the last year through an iterative review process involving the developer, the project architects, the Landmarks Commission, the St. Botolph community, and the design staff of the Boston Redevelopment Authority (BRA). Plans for this development were submitted to the Inspectional Services Department on September 10, 1987. The proposed is a development which has received the enthusiastic support of the community since its inception.

B. Project Summary

We have designed a development of 74 residential units which will be primarily skewed to larger units of 2 and 3 bedrooms. A below grade garage of 74 spaces will also be constructed. Gross square footage in this development will be 88,197 square feet, exclusive of the garage. The total square footage, including the garage, will be 115,097 gross square feet.

The design scheme is a five story brick structure of traditional rowhouse design, built to surround a period English landscaped courtyard. The development will make use of bows, bays, and lintels which reflect similar architectural features commonly found in this Back Bay neighborhood. The development plan incorporates a pedestrian passageway which extends from Garrison Street in the Back Bay through to the MBTA cover which borders the entrance to the South End.

Extensive consultation with both the BRA and the developers/architects of the contiguous parcel at 30 Garrison Street have resulted in a cohesive landscaping and exterior design scheme between the two parcels.

C. Parcel History

The proposed site is a 29,328 square foot lot, with dimensions of approximately 179 by 165 feet. The MBTA Southwest Corridor structure abuts the southern side of the site, and a condominium development (30 Garrison Street) is presently under construction immediately adjacent to the east property line. Across the alley on the north side is the back of 70 St. Botolph Street, housing for the elderly.

Currently on the site is a two story warehouse structure (see photos in Appendix). The warehouse was owned and utilized by the Hayes-Bickford Lunch System, Inc. from 1931 to 1971, when the property was conveyed to the First Church of Christ, Scientist in Boston, Mass. Since that time it has continued in use as a storage facility. The developer has received approval for the demolition of this facility from the Boston Landmarks Commission.

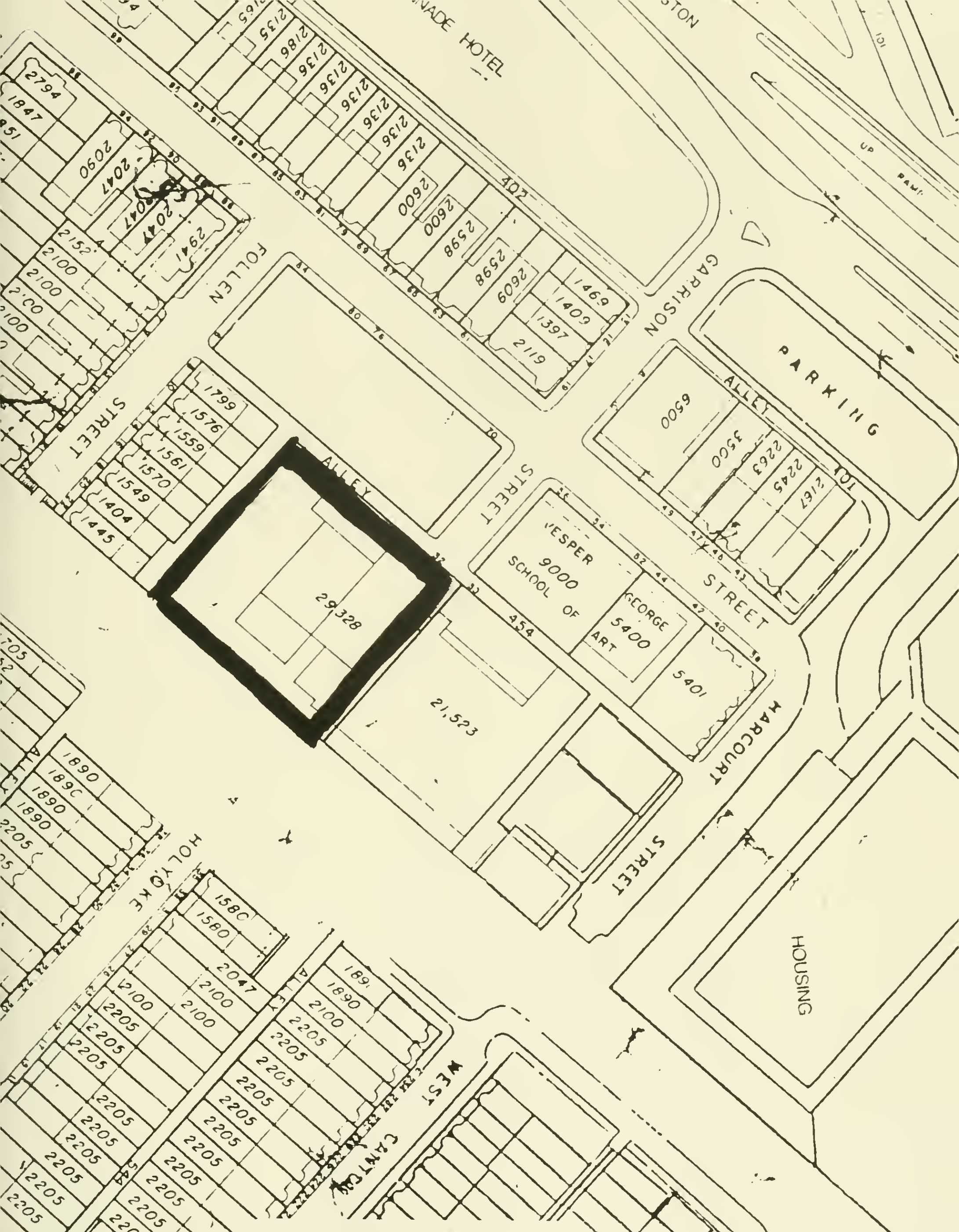
The current warehouse is an eyesore in the St. Botolph neighborhood. A change in the use of this parcel represents a positive contribution to the design character of the surrounding community, and to the revitalization of the city´s neighborhoods.

D. Neighborhood Context

The neighborhood itself is primarily residential. This parcel is a connecting link between the side streets of the South End and the larger scale St. Botolph Street on the north. The pedestrian arcade incorporated into the 32 Garrison design scheme reinforces this South End/Back Bay connection. (See history of St. Botolph area under Historical Resources.)

Homes on the surrounding streets are typically 4-5 stories in height. To the west, we are bounded by the rear of the Follen Street residences which reflect this same scale. To the north sits the 8-9 story elderly residence at 70 St. Botolph Street. To the east, a new 5 story building is under construction.

The five story brick structure incorporates many architectural features found in the neighborhood. Design development meetings included many with the architects of the adjacent project, to coordinate paving materials, cornice lines and string courses, etc.



SITE LOCATION
B.R.A. TOPOGRAPHIC MAP

E. Proposed Project Statistics

Renaissance Properties proposes to build an 86,494 square foot development of five stories. The development is approximately 53 feet in height for the bulk of the building, with tower elements which anchor the corners at slighly higher elevations (see plans in Appendix).

PROJECT DIMENSION SUMMARY

Total square feet	115,097
Gross residential square feet	88,197*
Net residential square feet	76,953
Height	67´3"
No. of stories	5
Square footage of lot	29,328
Parking facilities	74 cars below grade
F.A.R	2.96

*Inclusive of all mechanicals (not included in zoning computation, as per code.)

DIMENSIONAL SQUARE FOOTAGE

32 GARRISON STREET
BOSTON, MASS.

FIRST FLOOR	16436 SQUARE FFET
SECOND FLOOR	17065 SQUARE FFET
THIRD FLOOR	18824 SQUARE FFET
FOURTH FLOOR	18824 SQUARE FFET
FIFTH FLOOR	17048 SQUARE FFET
TOTAL	88197 SQUARE FFET
GARAGE	26900 SQUARE FFET
TOTAL	115097

UNIT DIMENSIONS BY FLOOR
32 GARRISON STREET

	1 BEDROOM	2 BEDROOM	3 BEDROOM
FLOOR ONE:	773.08	1016.5	1331.56
	922.64	939.19	1358.58
		1177.86	
		1142.46	
		957.85	
		970.14	
		941.67	
		1189.15	
		771.43	
		597.48	

FLOOR ONE PUBLIC AND MECHANICAL: 2346.43

FLOOR TWO:	1007.5	1073.77	1356.3
		986.78	1297.88
		1022.88	
		974.89	
		932	
		934.67	
		976.5	
		1250	
		900	
		1142.67	
		747.75	
		590.5	

FLOOR TWO PUBLIC AND MECHANICAL: 1871.46

FLOORS THREE/FOUR:			
	716.5	1071.6	1693.67
	634	943	1310.7
	760.45	932	1559.3
		931	
		928.56	
		935.2	
		947.1	
		1003.6	
		1050.7	
		1154.85	

FLOORS THREE/FOUR PUBLIC AND MECHANICAL: 2252.04

UNIT DIMENSIONS BY FLOOR

32 GARRISON STREET

FLOOR FIVE:

693	1185	1197
634.5	962	1159
772.25	879	
	895.56	
	935.2	
	959.1	
	924	
	922	
	1117	
	1161	

FLOOR FIVE PUBLIC AND MECHANICAL:	2252.04

F. Parking Facility

A below grade parking facility for 74 cars will be constructed. Entrance to the parking facility will be off public Alley #454.

G. Open Space

The development provides approximately 10,000 square feet of open space. The design for open space begins with a central landscaped courtyard reminiscent of an English manor garden. The development abuts the newly created parkland which acts as the green cover for the MBTA. The courtyard is designed to open out onto this green space, and because it will be slightly depressed it will work well with the scale of the building, allow for stoops, and raise the first floor to provide additional privacy.

H. Development Status/Predevelopment

We have performed extensive test borings and preliminary geotechnical site work at 32 Garrison Street. A full 21E site assessment has been initiated, which will be submitted to our title insurance company and bank prior to closing.

All preliminary schematics are completed, and working drawings are approximately 60% completed at this time. Plans & specifications have been sent out to bid by subcontractors, and a full construction budget is in progress. A full financing commitment is in place with the Bank of New England in Boston.

Plans were submitted to the Inspectional Services Department on September 10,1987. An appeal was drafted, based on ISD´s refusal letter, to the Zoning Board of Appeals on November 10, 1987. The scheduled ZBA date is unknown at this time.

Detailed plans, elevations and perspective renderings have been reviewed by the staff of the Boston Landmarks Commission staff. A productive dialogue has led to modification by the developer/architect, and we are prepared to go before the full Commission, pending receipt of zoning relief.

The community has been intimately involved in this process since preliminary plans were drawn. We have their enthusiastic support.

III. ENVIRONMENTAL IMPACT ASSESSMENT

32 GARRISON STREET CONDOMINIUMS
SOUTH END, BOSTON, MASS.

A. TRANSPORTATION IMPACT STUDY AND ACCESS PLAN

prepared for:

RENAISSANCE PROPERTIES, INC.
321 COLUMBUS AVENUE
BOSTON, MA 02118

by:

HOWARD/STEIN-HUDSON ASSOCIATES, INC.
312 SAVIN HILL AVENUE
DORCHESTER, MA 02125

DECEMBER, 1987

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I. INTRODUCTION AND PROJECT DESCRIPTION

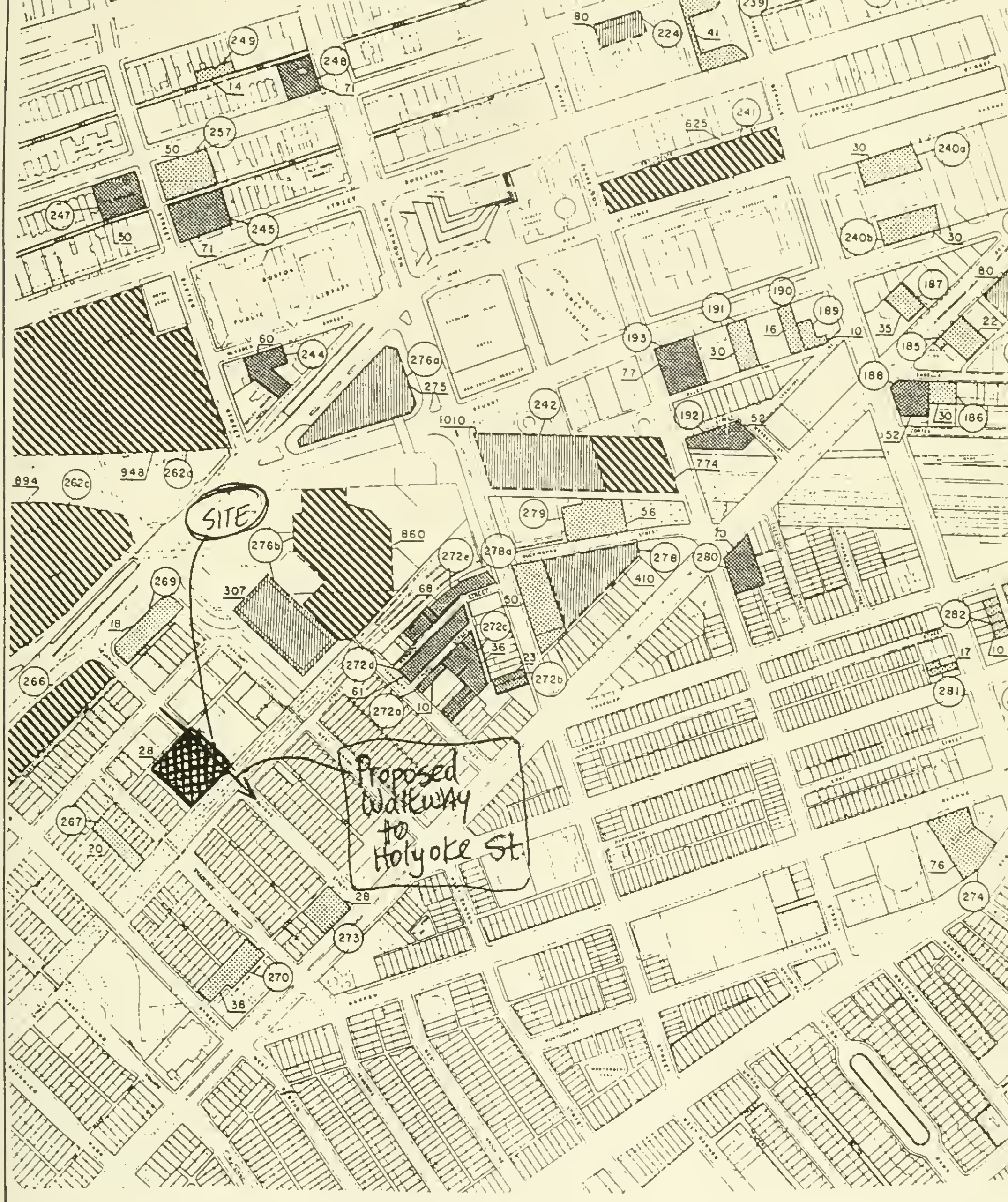
The 32 Garrison Street condominium project is located in the St. Botolph neighborhood of Boston, between the Back Bay and South End (Figure 1). The site is located on Garrison Street, a dead-end residential street. The parcel, bounded on the west by Follen Street, on the east by Public Alley 454, on the south by the Southwest Corridor, and on the north by #70 St. Botolph Street, is accessed by Garrison Street and the Public Alley, which runs one-way from Follen Street to Harcourt Street. The developer proposes new construction of 74 residential condominium units, served by 76 parking spaces in a below-grade garage, for a ratio of just over 1 space per unit. The garage entrance would be off Public Alley 454, accessed via Garrison Street. A special feature of the project is provision of a lighted pedestrian way to the east of the building, connecting across the decked Southwest Corridor right-of-way to Holyoke Street. This pedestrian connection, which was sought by community residents, was planned for in the Southwest Corridor design.

This report sets forth the transportation impacts of the proposed project in fulfillment of the Access Plan requirements of the Boston Redevelopment Authority and the Boston Transportation Department. The scope for the report was determined in a meeting with Andrew McClurg of the Boston Transportation Department and Owen Donnelly of the Boston Redevelopment Authority on November 13, 1987. This report contains the following sections:

- Existing Conditions;
- Future Trip Generation;
- Parking Supply and Management Issues;
- Construction Traffic and Parking Management.

II. EXISTING CONDITIONS

The project is located in close proximity both to the Prudential Center



HOWARD/STEIN-HUDSON
ASSOCIATES, INC.
312 Savin Hill Avenue.
Dorchester, Massachusetts 02125
(617) 288-4995

Figure 1

SITE LOCATION

N

and Copley Place development projects. Arterial access is provided via Garrison Street to Huntington Avenue, and via St. Botolph Street to Massachusetts Avenue. The primary land use in the immediate neighborhood is multifamily residential. An adjacent residential project has been proposed by another developer on Harcourt Street, with access off Garrison and the same public alley. Renaissance Properties has sought to coordinate the construction management and access planning for St. project with the Harcourt St. project to the extent possible. In addition, Renaissance Properties has written a Letter of Intent to purchase another building on Garrison Street, formerly occupied by the Boston Shakespeare Theater, for conversion to 32 residential units. This purchase has not yet taken place.

Pedestrian access to the Back Bay is very good, as is transit access. The site is one block from the Back Bay Orange Line and commuter rail station, and from the Prudential Station on the Green Line.

In pursuing approvals for the project, the developer has attended neighborhood meetings, and the project has received the endorsement of the St. Botolph Neighborhood Association.

III. FUTURE TRIP GENERATION

Trip generation by mode for the proposed condominiums was estimated as follows. Standard vehicular trip generation rates as found in the 1985 Institute of Transportation Engineers reference manual, Trip Generation, were used as the basis for daily and peak hour trips, adapted for urban downtown conditions. The vehicular trip generation rates contained in the ITE manual are based upon field surveys taken at suburban locations with a very low level of transit use. Thus, to obtain an accurate indication of person trips by all modes in a location such as the St. Botolph neighborhood, the vehicular trip rates must be translated into total person trips, and then reassigned to modes

according to the most recent information which is specific to downtown Boston. This was done as follows:

- The vehicular trip rates were multiplied by an auto occupancy factor of 1.4 persons per car to obtain total person trips for each time period. This auto occupancy rate applies to the ITE survey data.
- The person trips were then assigned to modes based on the source: "Diversity and Change in Boston's Neighborhoods 1970-1980," a compendium of 1980 U.S. Census data for Boston residents compiled by the BRA. For this location, which is on the border between the Back Bay and South End, data for both the South End and Back Bay/Beacon Hill were consulted. The figures for the South End were chosen as most representatative of resident travel patterns, because they showed slightly higher auto use and lower walk trips than Back Bay/Beacon Hill. This source shows that only one-third of South End residents use autos to get to work.

The results of these analyses are shown in Table 1, which shows that the 74 residential units will generate a total of 508 person trips per day, 254 leaving and 254 returning. Of the total, about 173 will be walk trips, 168 will be transit trips, and 168 will be persons using a car. To determine the number of vehicles, a 1.5 car occupancy rate was applied, based on the fact that the 1980 U.S. Census data showed half as many South End residents were auto passengers (11%) as auto drivers (22%). Application of this rate yields a total of 56 vehicles in and 56 out daily.

These volumes will not impact the residential character of the neighborhood, and they will not cause any negative impacts on Garrison Street. In addition, they can easily be accommodated by the proposed garage access arrangement.

Parking Supply and Management Issues

As shown in Table 1, the project itself, at current South End car ownership and occupancy rates, is projected to generate 56 residential vehicles in and 56 vehicles out per day. The parking supply is adequate to meet the residential and visitor demand, with a ratio of 1.0 spaces per unit, given that auto ownership in the South End in 1985 was only .48 cars/household,

according to a BRA/NDEA 1985 Household Survey, and car ownership in the Back Bay was only .47 autos/household.

Table 1

32 GARRISON STREET
PERSON TRIP GENERATION BY FLOOR SPACE USE

	Average Daily		A.M. Peak		P.M. Peak	
	Arrivals	Departures	In	Out	In	Out
Walk Only (persons):	86	87	2	12	12	6
Transit Users (walk & ride, persons):	84	84	2	12	12	6
Auto Users (persons)	84	84	2	12	12	6
(vehicles)	56	56	1	8	8	4
All Modes Total Persons:	254	254	7	36	36	17
Total Vehicles:	56	56	1	8	8	4

Based on the following modal split data:

Residential:
33% walk
33% transit/other
33% drive (car occupancy 1.5)

Parking Supply and Demand

The Boston Transportation Department has raised the issue of how the 32 Garrison Street project and the Shakespeare Theater project would interrelate in terms of parking. This is a concern because it is not possible to provide parking as part of the theater building conversion. Should they decide to go ahead with the theater building project, it would be the intention of Renaissance Properties to make unsold spaces from the 32 Garrison St. project available to the residents of the Shakespeare Theater building. This building is expected to have 32 units. Applying South End car ownership ratios to the

total units in both projects yields a parking demand of 50. The ratio of spaces for the total of 106 units would be .71 spaces/unit, meeting South End zoning requirements. If all the parking spaces are not sold after all the Shakespeare Theater units are sold, spaces would be made available to other neighborhood residents.

Resident Demographics and Car Ownership

Boston Transportation Department has raised the issue of what the demographic characteristics of the proposed condominium owners would be and how these factors would influence car ownership. It is expected that the market rate condominium units would sell in the range of $225 to $275 per square foot. Units will be marketed to a range of buyers, including both individuals and married couples without children. Renaissance has found that over 60% of purchasers of several of its higher priced South End condominium projects are actually "trade-up" buyers from other Renaissance buildings in the South End, moving from a one-bedroom to a two-bedroom unit, or to a more luxurious unit. Household income would certainly exceed average family income for the South End; however, as stated above, only 70% of condominium owners in similar downtown Boston condominium developments marketed by Renaissance Properties have typically bought the parking spaces offered with the units.

Construction Activity

The main concerns with respect to construction are that construction vehicles do not travel needlessly on local streets, that trips by heavy vehicles are both minimized and scheduled so as not to conflict with peak hour traffic or cause noise at early morning/late night hours, and that workers and trucks do not park on the already overburdened local streets.

The primary means of construction vehicle access to the project site would be from Public Alley 454. Construction is expected to begin in January,

1988 and end in March, 1989, a total of 15 months. The average number of workers on site at any one time would be around ten; the maximum number would be around twenty. Construction vehicles will park on site. front of the site. As soon in the construction process as it is physically possible to do so, contractor vehicles will be allowed to park in the garage.

The developer and contractor will comply with all City permitting procedures as required by the Inspectional Services, Public Works and Transportation Departments.

Monitoring

It is recognized that the preparation of the transportation impact study and plan is a first step in achieving the City's access goals. The access plan process also provides for an appropriate level of post-implementation monitoring so that the cumulative effects of a number of projects in a given area can be seen. In this regard, the developer will cooperate with the BRA and the Boston Transportation Department in conducting any required surveys of the eventual condominium owners and retail tenants to establish the actual level of car ownership, parking practices, and modal use.

B. Shadow

1. Introduction

A full set of shadow impact analyses was prepared to evaluate the incremental shadow impact the proposed development will have on surrounding buildings. The marginal shadow effect of the proposed project was determined to be minimal. Complete shadow diagrammatic representations follow, including sectional elevations of the Southwest Corridor.

2. Method of Analysis

Both existing and project related shadow conditions were analyzed. Shadow patterns were analyzed for 9:00 a.m., noon and 4:00 p.m. during the month of June, 9:00 a.m., noon and 4:00 p.m. in December, and 9:00 a.m., noon and 6:00 p.m. during both March and September.

3. Project Impacts

As is apparent from the diagrams, the southeast lot line of the proposed development abuts the new MBTA open parkland covering the Southwest Corridor. The site has excellent exposure and light conditions due to this southern exposure.

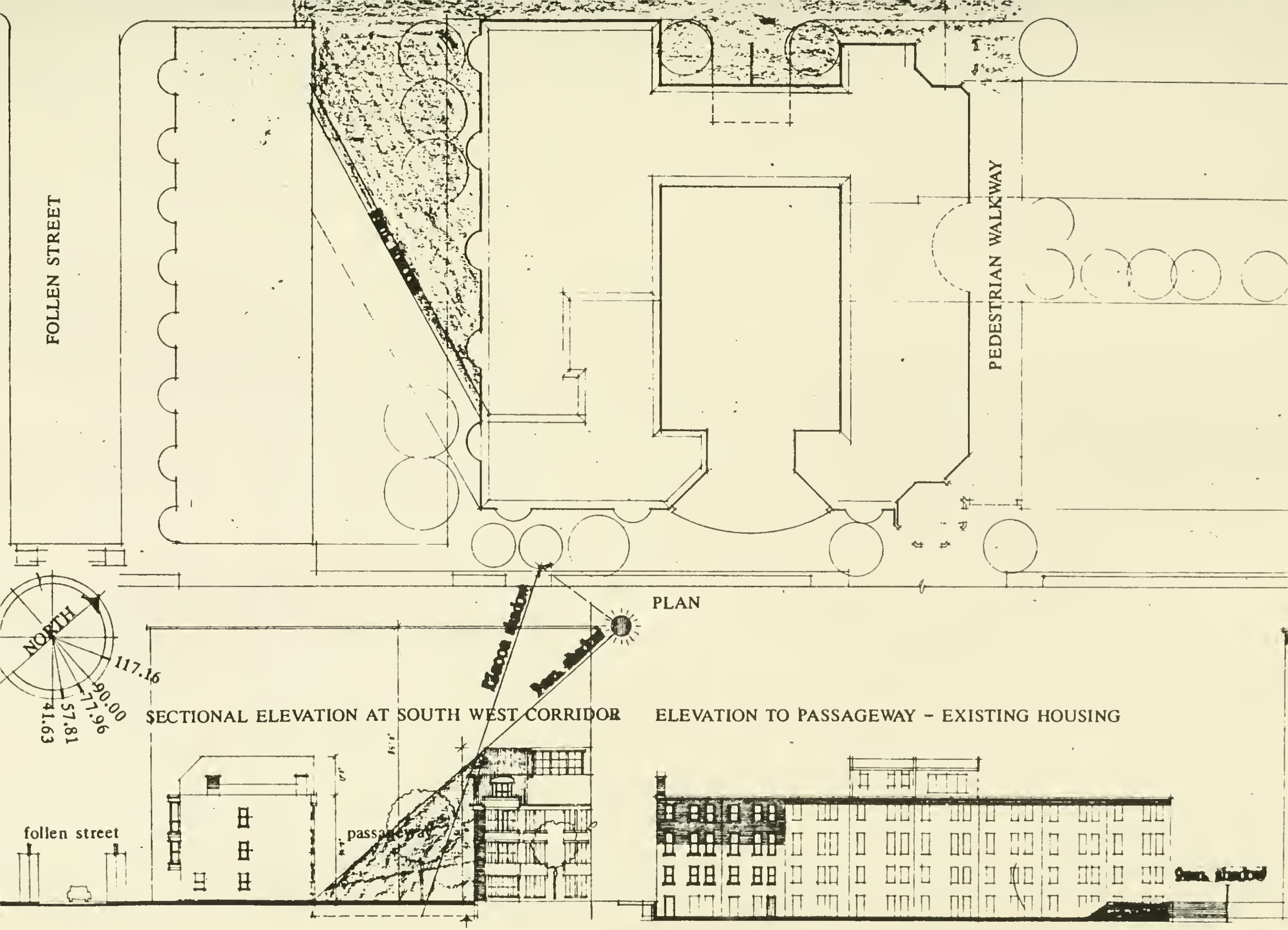
Numerous meetings were held with abutters regarding the marginal shadow impacts on their properties. It was determined that only the last townhouse on Follen Street would have additional shadow impact, and then only in early morning hours during June, on the basement and first floor levels.

Primary shadows generated by this development fall upon themselves, i.e. they shade portions of the interior courtyard of the development, and only at certain times of the year.

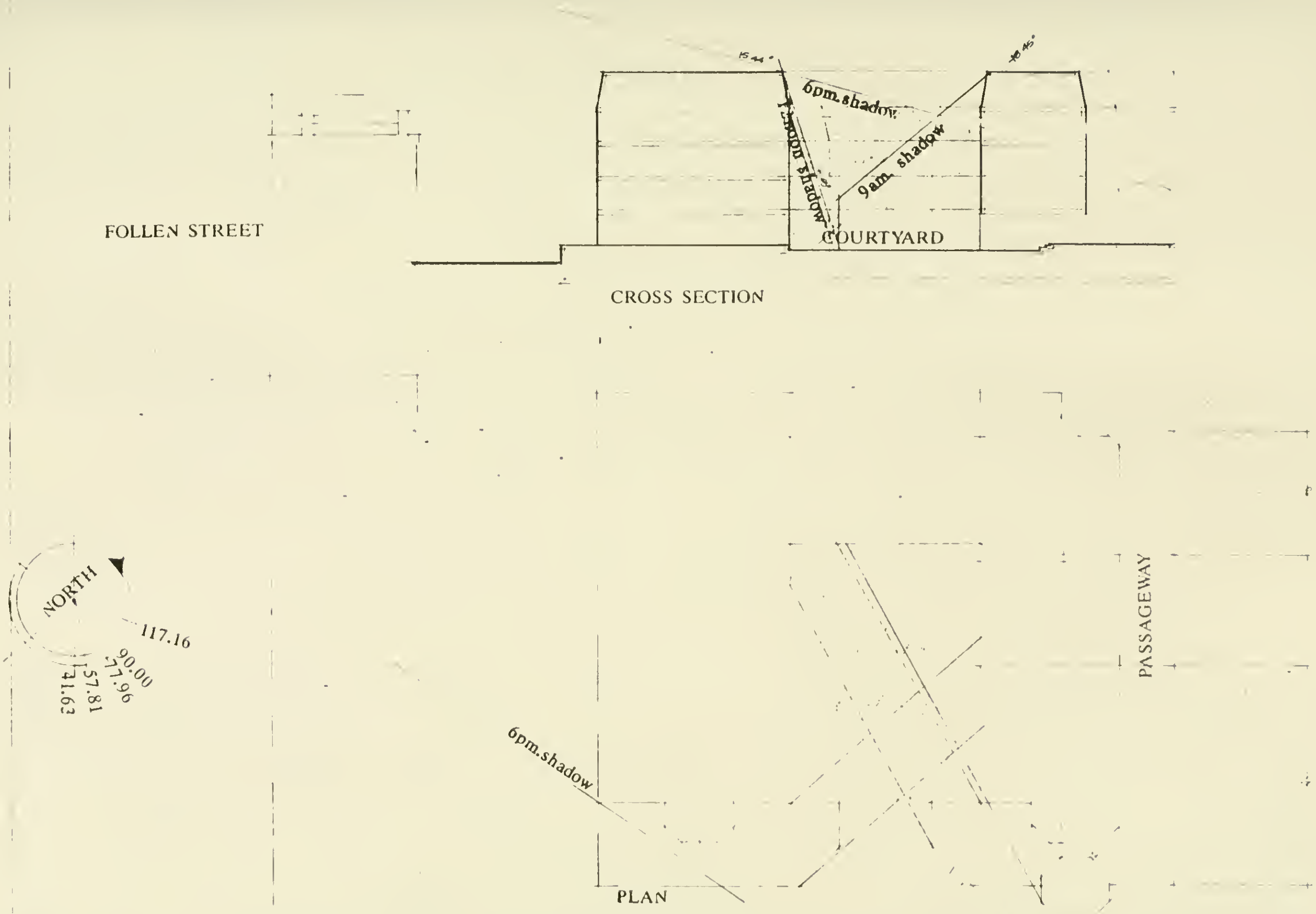
4. Diagrams

To follow.

SUN/SHADOW IMPACT STUDIES

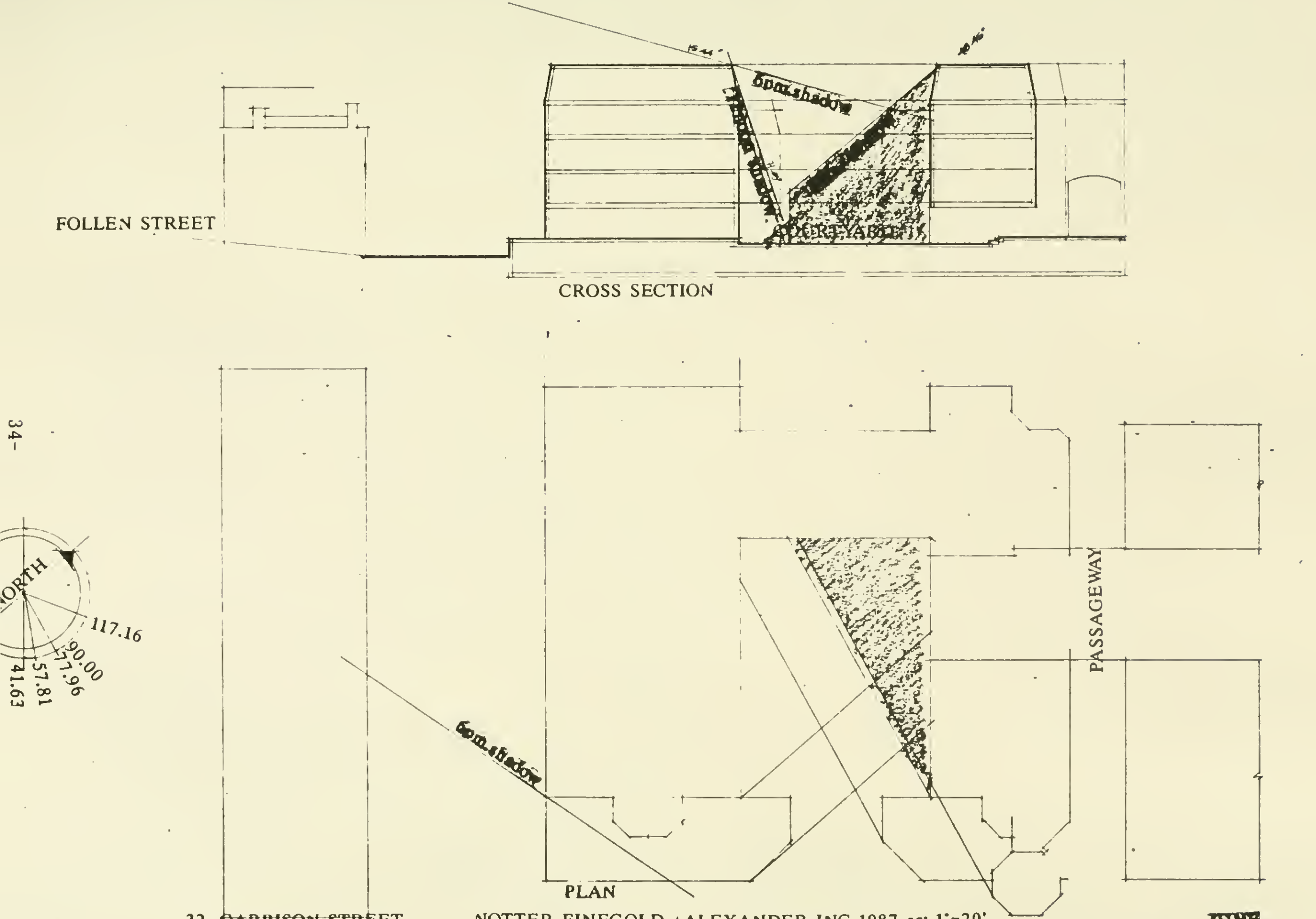


22 GARRISON STREET NOTTER FINEGOLD + ALEXANDER INC 1987 sc:1'-20' JUNE



32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1"=20' JUNE

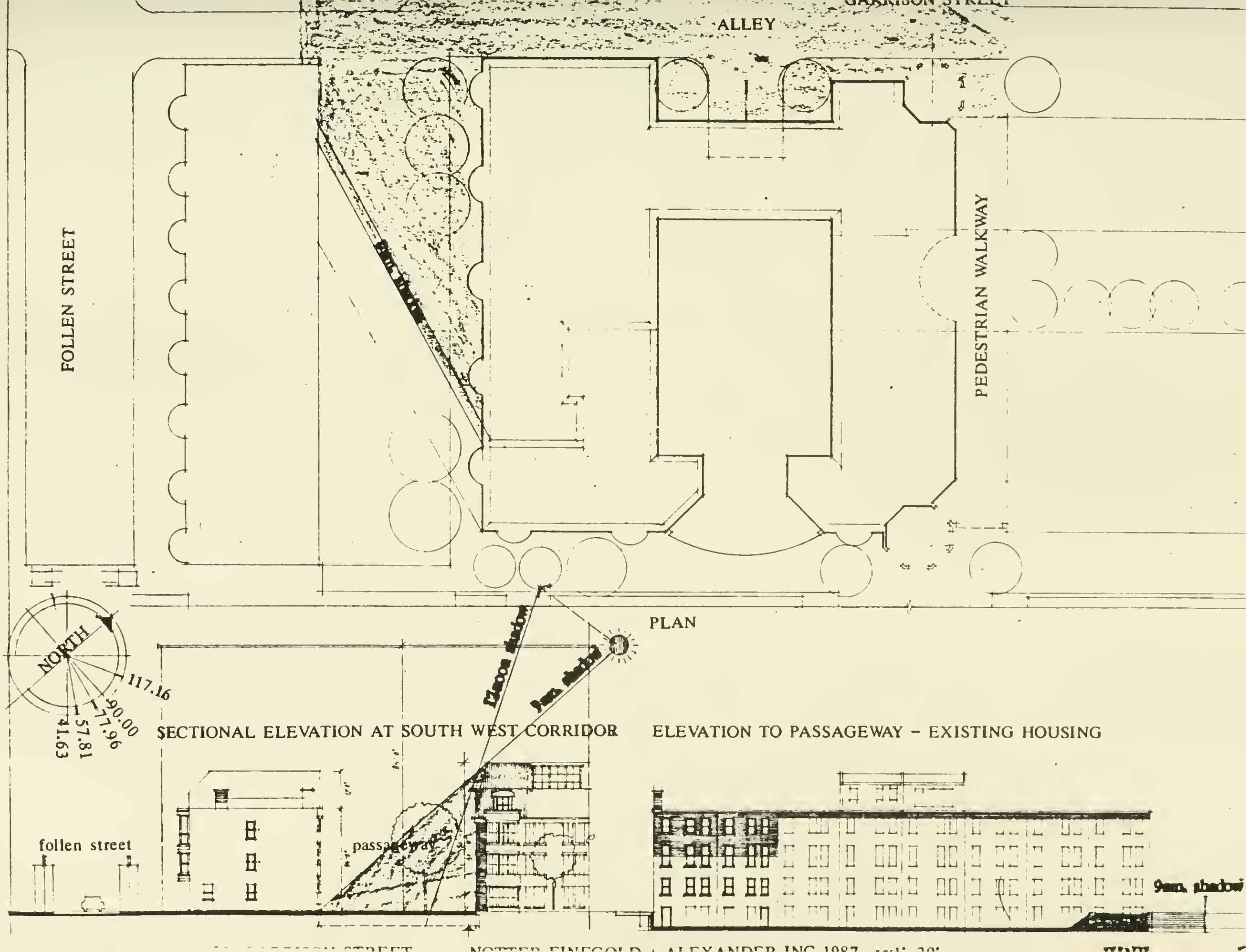
23 July 87

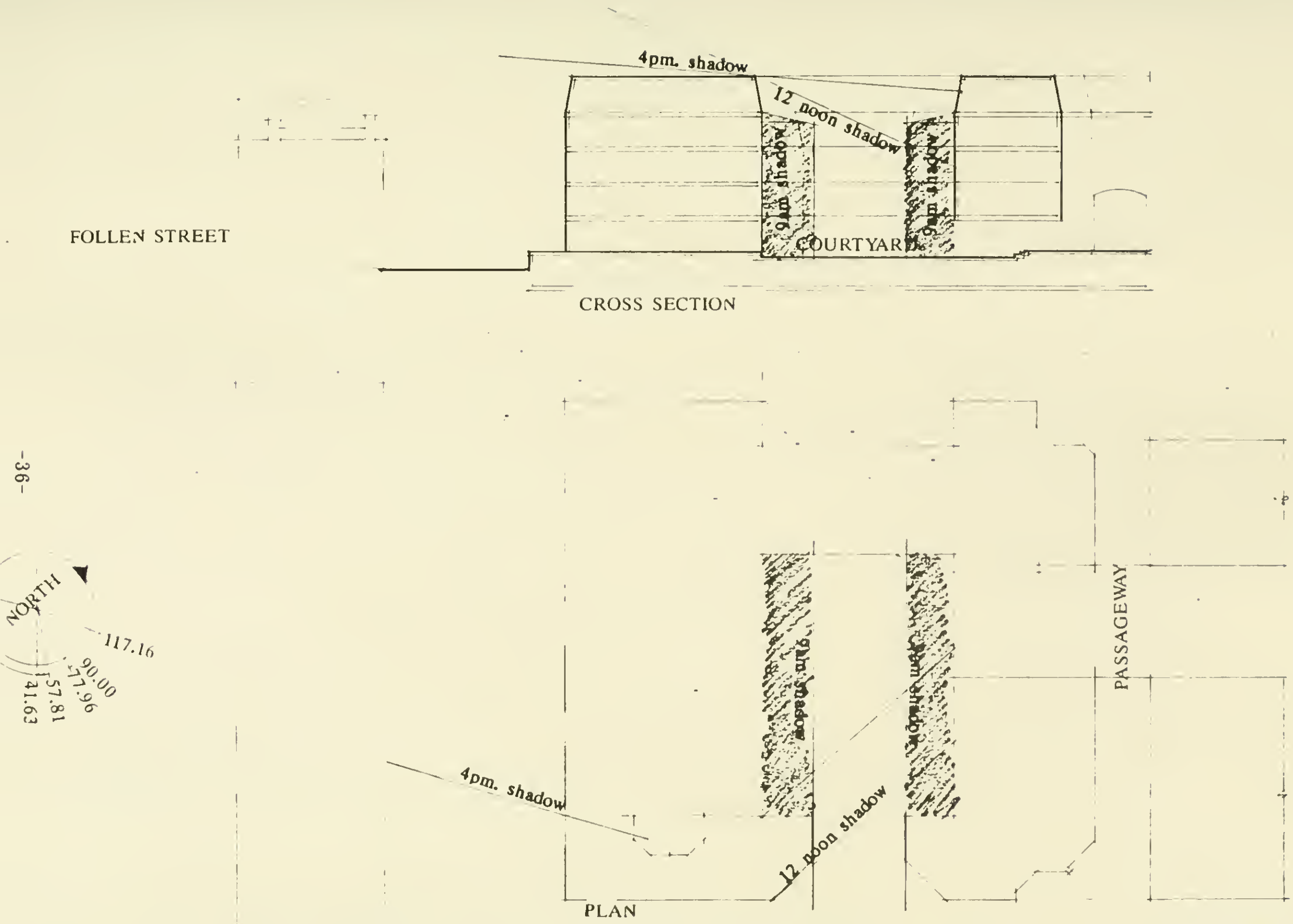


32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1'-20'

JUNE

Shown at meeting 23 July 87


ALLEY
PEDESTRIAN WALKWAY
FOLLEN STREET
PLAN
NORTH
117.16
90.00
77.96
57.81
41.63
9am. shadow
12noon shadow
SECTIONAL ELEVATION AT SOUTH WEST CORRIDOR
ELEVATION TO PASSAGEWAY - EXISTING HOUSING
follen street
passageway
9am. shadow
STREET
NOTTER FINEGOLD + ALEXANDER INC 1987



32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1"=20' DECEMBER

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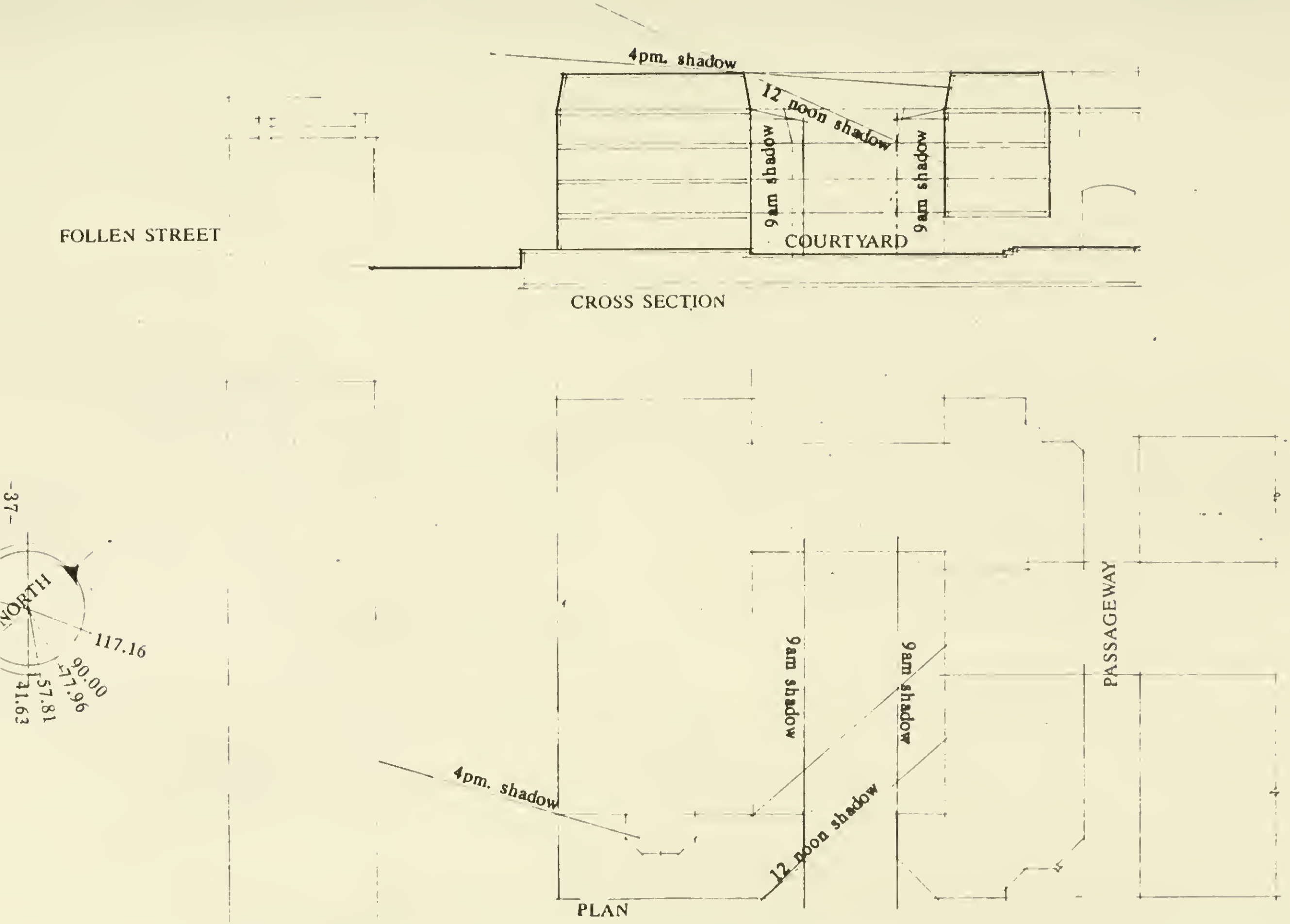
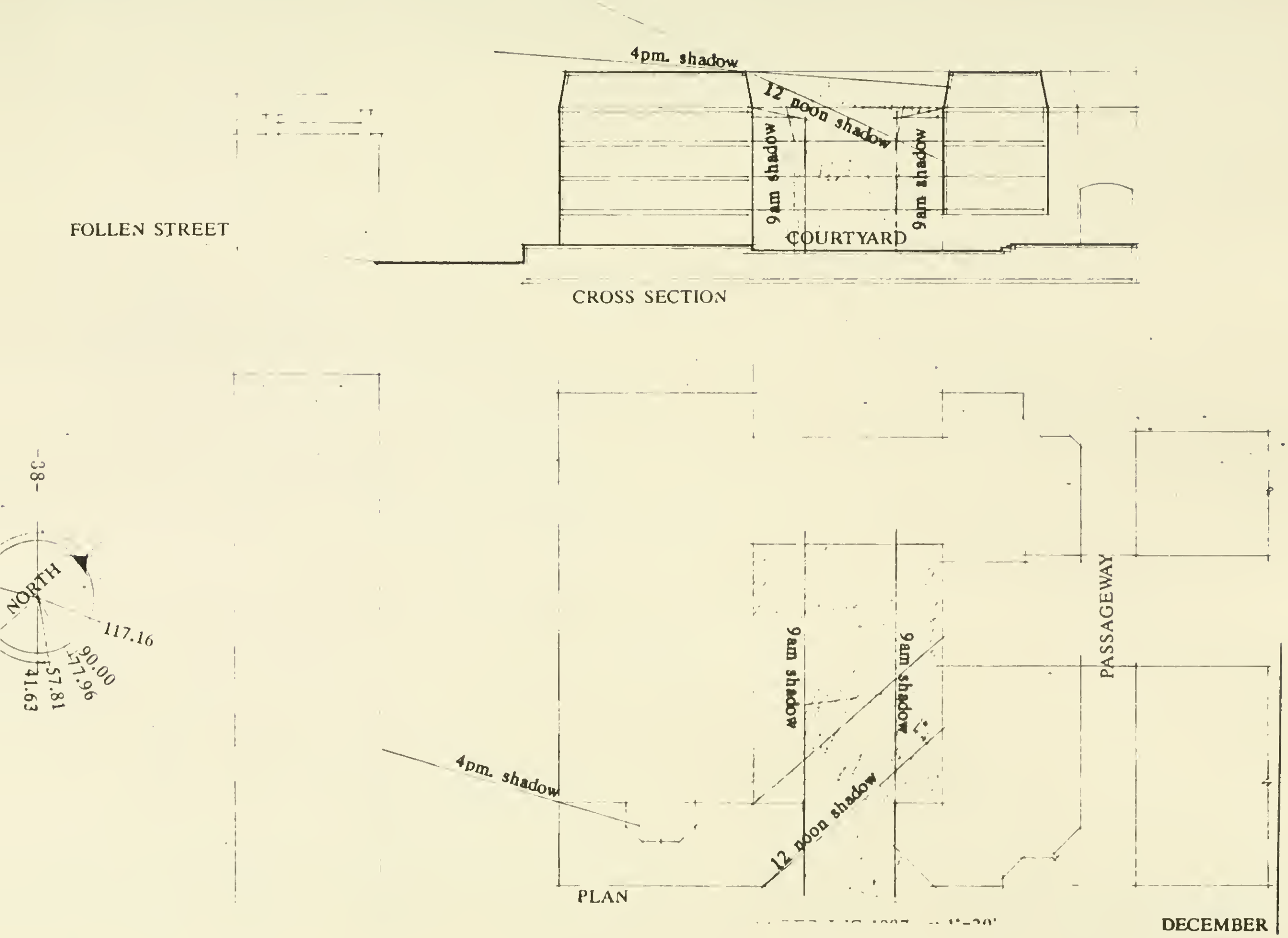


32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1"=20' DECEMBER

23 July 8

4pm. shadow
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FOLLEN STREET
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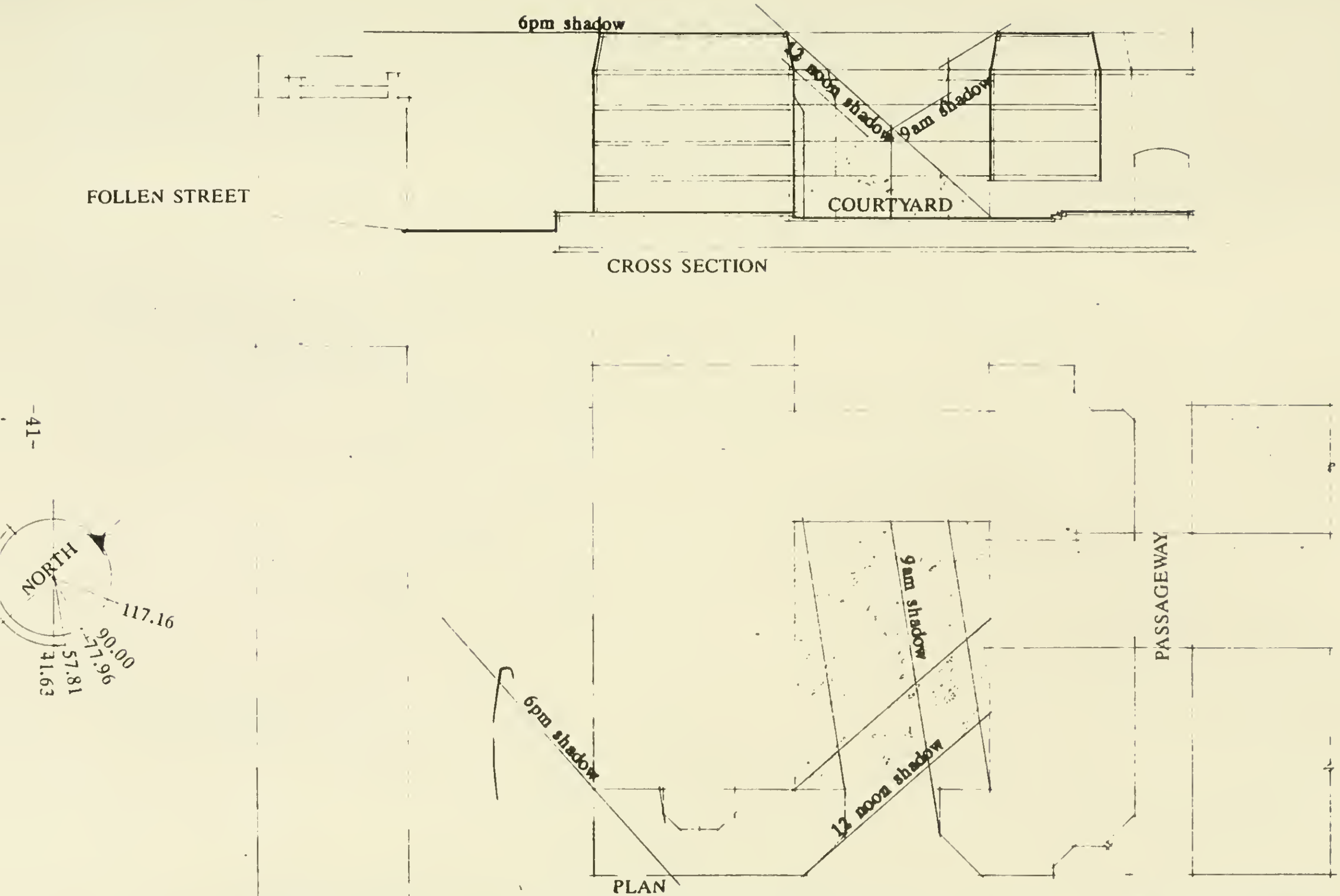
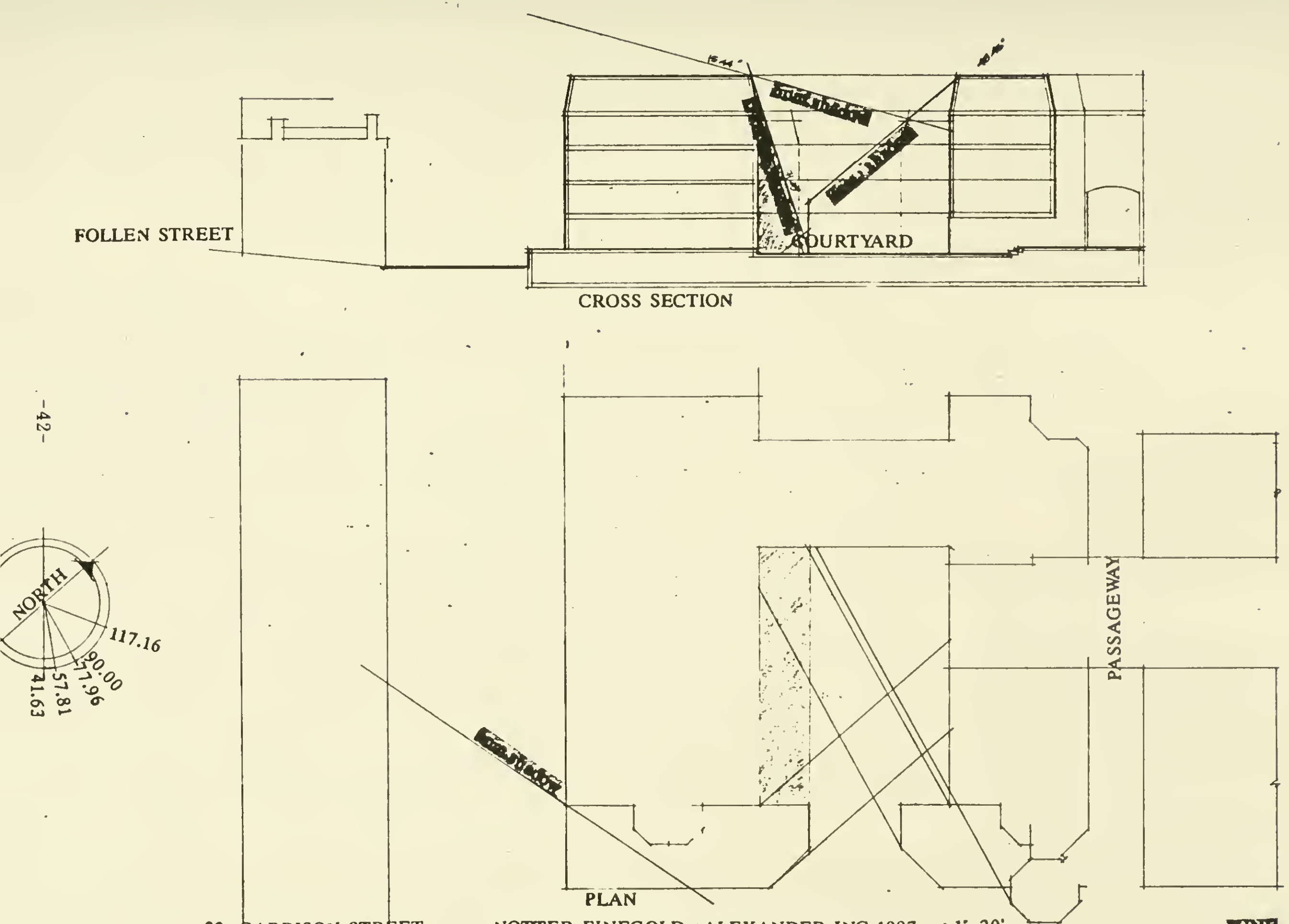
PLAN
DECEMBER

23



32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1"=20' MARCH / SEPTEMBER

23 July 8



CROSS SECTION

PLAN

32, GARRISON STREET NOTTER FINEGOLD +ALEXANDER INC 1987 sc: 1"=20'

JUNE

23 July 87

C. Wind Impact

There will be minimal pedestrian level impact of the proposed development on wind conditions in the area. Primarily, this is due to the limited overall height of the structure, and the extensive amount of open space provided by the interior courtyard, proposed setbacks, and proximity to the open space pertaining to the Southwest Corridor.

The height of the proposed building is consistent with that of surrounding structures. The Follen Street residences are 4-5 stories in height with roof top additions.

At 70 St. Botolph Street, immediately across public alley #454, there is an 8 story building with a height which surpasses that of our proposed building by approximately 30 feet. The contiguous parcel to the east at 30 Garrison Street is under construction and will result in a structure of virtually identical height to our proposed building. Renaissance Properties has worked closely with the developer of 30 Garrison Street to ensure that both development programs are consistent in scale, massing and height. The southernmost portion of the site is bordered by the open space of the Southwest Corridor.

The condominium complex will generate little additional pedestrian traffic near the building, other than that pertaining to the residences themselves. The site is located at the end of a dead end street, and is bordered on two sides by alleys which line the rear of the adjacent buildings and which are not primary traffic roads.

D. Construction

1. Introduction

The following describes the duration and scale of the construction activities generated by the proposed 32 Garrison Street development. It also identifies possible project impacts on the surrounding quality of life, and discusses possible areas in which disruption might by minimized.

The developer has had an excellent track record in monitoring the construction elements of its projects in the city's neighborhoods, from the building of the 60 unit Dartmouth Square in the South End, the 47 unit Bigelow School in South Boston and the 90 unit Clarendon Square development currently in progress.

The sequencing and critical path of construction activities will be finalized in more detail over the next several months. The developer is prepared to work with the BRA, appropriate city agencies, and the neighborhood to keep all fully informed as to the scope and nature of work.

2. Scheduling

The duration of construction activities at 32 Garrison Street is expected to last approximately 16 months. Four months of demolition, and below grade excavation for the parking facility will initiate the process. Twelve months of actual building construction will follow. The developer hopes to begin demolition in February, 1988 and targets a completion date of June, 1989.

A time line Gantt chart report showing the sequencing of construction activities follows this section. As the chart indicates, for the first 4-6 months construction activities are expected to be limited to demolition, excavation and site preparation. The site will be fully excavated to allow for a one level below grade garage.

Excavation at this site will take approximately two to three months. There will be no dredging or filling. Excavation will go down to the water table, with approximately 2,000 cubic yards of material to be removed. (The depth of the water table is reflected by data we obtained by performing borings at this site, which pegged water table depth at El. +8 [BCB].)

Piles will be driven on the site to a depth of approximately 125 feet below the surface. Pile driving will take approximately six weeks. Impact on adjacent buildings and utility lines is expected to be minimal.

The approximate existing ground surface is at an elevation of +16 feet (BCB). Subsurface soil conditions are fill to a depth of -2 to -3 feet, at which point borings have revealed organic silt to a depth of -20 feet. Peat, sand, and finally silty clay follow to a depth of at least -30 feet. Borings revealed 10-11 feet of glacial fill at approximately El. -111. Bedrock was cored from approximate depths of 135-144 feet. All dimensions will be verified during design of the excavation support system and/or during construction.

A complete geotechnical report detailing the scope of below grade work follows in the Appendix. A comprehensive analysis of the existing foundations of adjacent structures, utility lines, and ground water conditions is also included. Finally, recommendations for mitigation of soil settlement, frost protection, and ground water disruption are included as well.

3. Construction Impacts

32 Garrison Street is located at the end of a dead end street, and to the rears of the Follen Street residences and #70 St. Botolph Street, an elderly housing complex. A new development is currently in progress at 30 Garrison Street. The Southernmost portion of the site is bordered by the Southwest Corridor.

The site is not located on any through street which has a significant amount of traffic, either pedestrian or vehicular. Trips to and from the site by construction related vehicles is expected to cause minimal disruption to the abutters of this project.

The developer has agreed to work closely with the neighborhood, apprising residents of ongoing construction activities, and potential noise and vibration impact.

A full 21E hazardous waste study has been initiated. There is evidence of asbestos in the basement of the existing building. There are 2-3 underground storage tanks on the site, both of which will be removed in full compliance with regulations controlling the disposal of hazardous wastes on the site, after demolition of the existing warehouse. Appropriate measures will be taken to contain fugitive air pollutant parcels during all phases of hazardous waste removal.

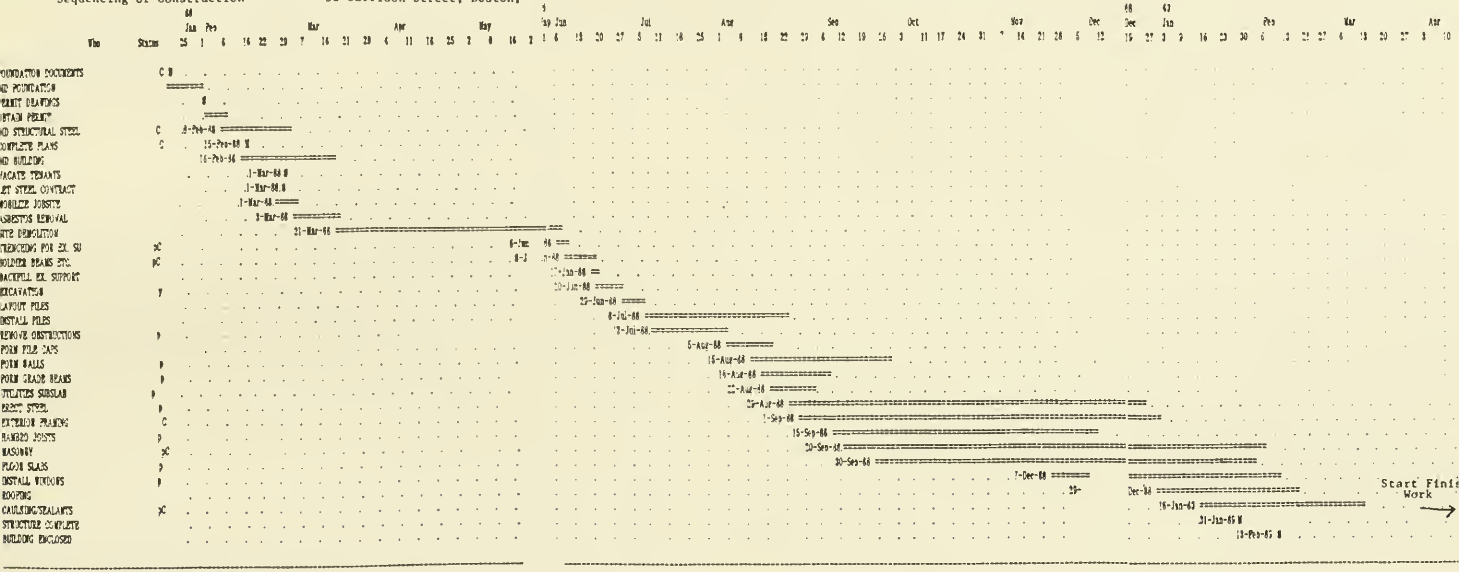
All testing and measuring of air pollutants and emissions, water consumption, sewage generation and storm water discharge will be undertaken as required by appropriate city and state regulatory agencies.

Our goal is to have the garage operational by the end of six months, at which point this facility will be used for parking construction vehicles and for storing construction materials.

Vibration analysis of passing Southwest Corridor trains has been initiated.

Sequencing of Construction 32 Garrison Street, Boston.

Sequencing of Construction
32 Garrison Street
Page 2



D Done === Task - Slack time (==---), or
C Critical +++ Started task Resource delay (---==)
R Resource conflict M Milestone) Conflict
p Partial dependency
Scale: Each character equals 1 day

TIME LINE Gantt Chart Report

IV. NEIGHBORHOOD AND COMMUNITY REVIEW

VI. NEIGHBORHOOD AND COMMUNITY REVIEW

A. Introduction

We have received singularly positive feedback from the community regarding our proposed development at 32 Garrison Street. We attribute this to several key factors:

-The removal of an unsightly neighborhood blight, out of scale and character with surrounding neighborhood structures.

-Renaissance´s reputation as an outstanding developer of architecturally distinctive residential complexes.

-Renaissance´s proven track record in working closely with the neighborhood as the developemnt process unfolds.

-The particular design of this development, which is extremely detailed, architecturally exciting, and appropriate in massing and scale to this site.

B. A documentation of formal neighborhood meetings follows.

B. Documentation of Neighborhood Meetings

32 Garrison Street Preliminary Meetings

Wednesday, September 9, 1987

Abutters meeting/St. Botolph Neighborhood membership*

Tuesday, September 15, 1987

General meeting/St. Botolph neighborhood Association, at which full approval was granted

Both meetings were preceded by informal meetings with abutters, Board members, and the Design Subcommittee of the St. Botolph Street Neighborhood Association, at which preliminary schematics and sun/shadow studies were presented. The Board unanimously recommended approval to the general membership.

Tuesday, September 15, 1987

The St. Botolph Architectural Commission granted unanimous approval for our application to demolish the existing on-site warehouse.

Ongoing design review meetings have been underway between Renaissance Properties, Notter, Finegold & Alexander (the architects), the Landmarks Commission, and the owners/architects of the adjacent development at 30 Garrison Street.

t. Botolph Street Neighborhood Association:

ibby Smith, President
75 St. Botolph Street
oston, MA 02116
17)437-7700 (work)

C. Public Benefits

1. Generation of 150-200 construction and construction related jobs in full compliance with the City of Boston EEO Guidelines.

2. Removal of an unsightly neighborhood blight.

3. An increase in tax revenues from zero (the amount currently paid by the First Church of Christ, Scientist) to up to $45 million annually, based on final assessments of individual condominiums.

4. The creation of affordable housing units equivalent to 20% of the total off-site, as per agreement with the Boston Redevelopment Authority.

5. An increase in the housing stock in the City, creating home ownership opportunities.

V. HISTORICAL RESOURCES

V. HISTORICAL RESOURCES

A. Introduction

As previously discussed, the existing warehouse at 32 Garrison Street was deemed to not be a Landmark structure of significance by the Boston Landmarks Commission. Full approval was received for its demolition.

The proposed site lies within the St. Botolph Area Architectural District. We have been working closely with the staff of that commission to ensure that the scale, massing and character of this development are consistent with structures typical of this neighborhood, and compatible with historical design guildelines. Lead architect for the development will be James Alexander of Notter, Finegold & Alexander. Mr. Alexander is the former Chairman of both the South End Historical Society and the Boston Landmarks Commission.

The pedestrian arcade, which connects Holyoke Street in the South End with Garrison Street in the Back Bay, is anchored at each end by well articulated towers reminiscent of the slightly medieval turrets which line St. Botolph Street and the adjacent streets. As the following historical overview relates, this connection is appropriate from an urban planning, design, and historical standpoint. Traditional brick, stone, and cast iron will be extensively used throughout the development.

B. Historical Overview

The following is an excerpt from the A.I.A. Guide to Boston, Southworth, S.& M., Globe Pequot Press, Chester, CT, 1984:

St. Botolph Street was named for the sainted monk for whom Boston, England (a contraction of "St. Botolph´s town") was named. During the filling of the Back Bay from 1857 until 1882, the triangular area surrounded by the Boston-Albany railroad tracks on the north, the Boston-Providence on the south, and Massachusetts Avenue on the west remained unfilled. In 1871 the land was sold to the Huntington Avenue Land Trustees, who subdivided it into lots and sold them at auction. Speculative builders began building houses there in the 1880s, near the Massachusetts Avenue end of the triangle. The early brick row houses were single-family dwellings, but by the 1890s they were mainly four-family flats.

From the beginning the area has had a somewhat Bohemian atmosphere because of the artists, writers, and musicians who were attracted there. Among the artists and writers who have lived or worked in the area were sculptor Bela L. Pratt, poet Edwin Arlington Robinson, and writer Phillip Henry Savage. A painting of the street, "Noontime, St. Botolph," by the New York painter George Banjamin Luks (known as "Lusty Luks" for his earthy subjects) hangs in the Museum of Fine Arts. As described in the Museum´s slide catalogue, "Ochre-brown and red-brick houses with their purple and white striped blinds are steaked with purple shadows. An ice man, in yellow, walks in the pink and yellow street beside green grass."

Harcourt Street was and still is the location of the Harcourt Bindery (9-11 Harcourt), which practices the art of hand binding of books. Also on Harcourt Street is the stained-glass studio of master craftsman Charles Connick, now operated by his successors. Since its founding in 1912 the studio has made about 40,000 stained-glass windows, mainly religious, including those for St. Patrick´s and St. John the Divine in New York. Connick´s book "Adventures in Light" was praised by architects and critics both in Europe and America. Following Connick´s lead, another stained-glass shop, the John Terrance O´Duggan Studio, opened in 1935 in a house at 116 St. Botolph Street and continues today.

Throughout its history and up to the present time the area has had an interesting mixed-use character combining residences and businesses, a series of schools, and light industry. The railroad-track barriers kept it separated from the Back Bay until the development of the Prudential Center. Thus its orientation was toward Massachusetts Avenue and, over several bridges, to the South End. The redeveloped Southwest Corridor will further reduce the barriers between the South End and the St. Botolph neighborhood.

VI. REGULATORY CONTROLS & PERMITS

VI. REGULATORY CONTROLS & PERMITS

A. Zoning Relief Requested

Zoning Appeal, filed November 9, 1987, follows.

(This form must be filed in quadruplicate with the Inspectional Services Division of the City of Boston. This form must also be completed and signed by the property owner or by an authorized agent. Please attach the appropriate authorization.)

A

APPEAL

under Boston Zoning Code

Boston, Massachusetts, November 9, 1987

To the Board of Appeal in the Inspectional Services Department of the City of Boston:

The undersigned, being the owner
The owner(s) or authorized agent

of the lot at 32 Garrison Street, Boston 4
number street ward district

hereby appeal(s) under St. 1956, c. 665, s.8, to the Board of Appeal in the Inspectional Services Department of the City of Boston the action taken by the Inspectional Services Commissioner as outlined in the attached refusal letter.

Please set forth in detail what is sought by this appeal and the reasons therefor. Refer to instructions.

PART I - PURPOSE OF APPEAL

Michael A. Leabman, as Trustee of 32 Garrison Street Realty Trust (the "Appellant") filed Building Permit Application No. 1068 on September 10, 1987 seeking permission to demolish an existing storage building located on property Appellant owns at 32 Garrison Street (the "Property"), and to construct a new five story apartment building with a one level basement garage (the "Building"). The proposed Building will contain 74 dwelling units and the garage will contain spaces for 74 cars. The Property is located within an H-2-45 Zoning District, a Restricted Parking Overlay District, Subsection D of the Downtown Interim Planning Overlay District ("Downtown IPOD"), a Restricted Roof Overlay District, a Density Limitation Overlay District, and an Institutional Overlay District.

Continued on Next Page

For official use only:
Appeal #
Permit #
Code #
PDA Y N
IPOD Y N
DA = Planned Development Area
DD = Interim Planning Overlay District

Appellant 32 Garrison Street Realty Trust
By:
Michael A. Leabman, Trustee
Address c/o Renaissance Properties, I
321 Columbus Ave, Boston, MA
Telephone (617) 536-2700

Continuation from Page 1
Part I -- Purpose of Appeal

On November 9, 1987 the Inspectional Services Department issued a letter denying Appellant's application to construct the Building on the Property. The Inspectional Services Department letter of denial cited eleven violations of the Boston Zoning Code (the "Zoning Code"):

Section 15-1	Floor area is excessive.
Section 16-1	Height of building is excessive.
Section 16-8	Restricted roof structure district.
Section 17-1	Usable open space is insufficient.
Section 18-1	Front yard is insufficient.
Section 19-1	Side yard is insufficient.
Section 20-4	Rear yard is insufficient.
Section 21-1	Set back of parapet is insufficient.
Article 27D, Section 27D-7	Interim Planning Overlay District.
Section 23-9	Size of spaces and maneuverability.
Section 20-3	Projections in rear yard.

The Appellant hereby appeals from the denial, requesting that the Board grant variances from the provisions of §§15-1, 16-1, 17-1, 18-1, 19-1, 20-3, 20-4, 21-1, 23-9, and 27D-7. Appellant also requests interpretations of the Zoning Code with regard to §§23-9, and 27D-7, an interim planning permit pursuant to Article 27D, and a conditional use permit pursuant to §16-8.

PART II - REASONS FOR APPEAL

Appellant brings this appeal in order to provide 74 much needed new residential units in the St. Botolph area of Boston. The zoning relief requested herein is needed in order to provide dwelling units of a marketable size and cost in a building which will be an attractive and valuable asset to the neighborhood.

A variance is requested from §15-1, which requires a maximum floor area ratio of 2.00 in an H-2-45 district, to allow the Building to have a floor area ratio of 2.95.

A variance is requested from §16-1, which requires a maximum building height of 45 feet in an H-2-45 district, to allow the Building to have a maximum height of 69 feet.

A variance is requested from §17-1, which requires minimum usable open space of 150 square feet per dwelling unit in an H-2-45 district for a total of 11,100 square feet for 74 units.

The proposed plans provide a total of 10,365 square feet of usable open space on the Property which equals 140 square feet per dwelling unit.

A variance is requested from §18-1, which requires a minimum front yard depth of 20 feet, to allow the depth of the front yard to be 0 feet.

A variance is requested from §19-1, which requires a minimum side yard of 17.8 feet along the west lot line, and a minimum side yard width of 18 feet along the east lot line. The side yard width to be provided along the east lot line is 1.5 feet, and the side yard width to be provided along the west lot line is 0 feet.

A variance is requested from §20-3, which prohibits projections within 10 feet of the rear lot line. The proposed building extends at ground level to within 1.5 feet of the rear lot line, and portions of the Building at upper levels project within 10 feet of the rear lot line.

A variance is requested from §20-4, which requires that in an H district a lot with no side yard shall have a rear yard at least 30 feet deep. Since the proposed side yard depth along the west lot line is 0 feet, the §20-4 rear yard depth requirement of 30 feet applies to the Property rather than the minimum rear yard depth requirement of 18.75 feet as calculated according to §20-1 of the Zoning Code. A rear yard depth of 1.5 feet is proposed for the Property.

A variance is requested from §21-1 which requires minimum setbacks of parapets from each lot line. The minimum required and proposed setbacks of parapets for each elevation on the Property are as follows:

	Required	Proposed
North elevation (front) (Alley No. 454 and Garrison Street)	36.71 feet	0.0 feet
West elevation (side)	33.88 feet	1.5 feet
East elevation (side)	34.42 feet	0.0 feet
South elevation (rear)	36.91 feet	1.5 feet

A variance is requested from §23-9, with respect to its requirement that off-street parking facilities provided to comply with the Zoning Code have sufficient maneuvering and access areas. This variance is required because not all of the

maneuvering and access areas to be provided conform to the standard generally required by the Inspectional Services Department under §23-9.

The denial letter issued by the Inspectional Services Department also cited a violation with respect to §23-9 with respect to the size of parking spaces. §23-9 requires parking spaces provided to comply with the Zoning Code each be at least 8.5 feet in width and 20 feet in depth exclusive of maneuvering and access drives. The Building plans provide for 74 parking spaces, only 52 of which are required to comply with the Zoning Code parking requirements (74 dwelling units x .7 as specified in §23-1). 55 of the proposed parking spaces will comply with the required 8.5 by 20 foot dimensions. However, the additional spaces, which are not required to meet the Zoning Code off-street parking requirements, do not comply with the parking space dimensional requirements of §23-9. 18 parking spaces will be 7.5 by 16 feet, and 2 spaces will be configured as a "tandem" space, meaning that one space will only be accessible if the space next to it is vacant. Appellant requests an interpretation from the Board that a variance from the §23-9 parking space size requirement is not required with respect to the 20 parking spaces which will not have minimum dimensions of 8.5 by 20 feet exclusive of maneuvering and access areas, as these spaces are not "off-street parking facilities provided to comply with . . . Article [23 of the Zoning Code]." In the alternative, if the Board finds a variance is required, Appellant requests that a variance be granted allowing 20 parking spaces to be smaller than the minimum dimensions specified in §23-9.

Appellant also requests an interpretation of the Zoning Code from the Board with respect to Article 27, 27D-7. This section requires that in Subsection D of the Downtown IPOD the provisions of the Downtown IPOD shall supercede the underlying zoning requirements, except with respect to building height and floor area ratio ("FAR") standards, in which case the more restrictive provisions shall govern. The Downtown IPOD As-Of-Right Height and FAR requirements are 65 feet and 4.00 respectively. The underlying H-2-45 requirements of 45 feet and 2.00 are more restrictive and thus they apply. As set forth above, Appellant requests variances from §16-1 and §15-1 allowing a maximum building height of 69 feet and an FAR of 2.95. If such variances are granted by the Board, the Property will be in compliance with the underlying zoning, as varied by the Board's decision in this case. Accordingly, Appellant requests an interpretation from the Board that no variance is required with respect to §27D-7 because this section will not be violated by the Building and the Property. In the alternative, if the Board finds such variance is required, Appellant requests that a variance be granted with respect to §27D-7 allowing the building to have a maximum building height of 69 feet and an FAR of 2.95.

Appellant also requests that the Board grant an Interim Planning Permit for the proposed Building as is required pursuant to Article 27D since the Property is located in the Downtown IPOD and the proposed Building will have a gross floor area of more than 50,000 square feet.

Finally, Appellant requests that the Board grant permission for two stairway and elevator headhouses to be erected on the roof of the proposed Building as the means of access to two open roof decks. The proposed headhouses will be nine (9) feet higher than the proposed roof decks, and pursuant to §16-8(c), no such structure which will be more than 30 inches above a roof deck is allowed without the permission of the Board after notice and hearing and subject to the conditional use permit requirements of §§6-2, 6-3 and 6-4.

PART III - WHY THE BOARD SHOULD GRANT THE RELIEF REQUESTED

The Board should grant the relief requested so that the Appellant may provide much needed quality housing and off-street parking. Currently a largely vacant and architecturally undistinguished storage structure is located on the Property. The proposed project will result in an appropriate residential use for the Property and a well-designed building which is compatible with surrounding buildings. Furthermore, the Appellant submits that the Property and the Building to be constructed thereon meet all the standards set forth in §7-3 of the Zoning Code for the issuance of variances, all the standards set forth in §27-3 and §27D-14 of the Zoning Code for the issuance of an interim planning permit, and all of the standards of §16-8 and §6-3 for the issuance of a conditional use permit for a stairway and elevator headhouse.

III.A. The Variances

The requested variances should be granted in the first place because these variances are required due to special circumstances which are peculiar to the Property and the Building, and not the neighborhood. The Property is and will be surrounded by the side and rear elevations of abutting buildings and by a narrow alley and passageway. The yard and setback of parapet variances (§§18-1, 19-1, 20-3, 20-4 and 21-1) are necessary to accommodate the provision of an interior courtyard on the Property. This interior courtyard will maximize the light and air available to the 74 dwelling units, and given the Property's location, will be more attractive visually than yards

Second, as required by §27D-14, the proposed project is in substantial accord with the applicable provisions of Article 27D. As discussed above, the building height and FAR of the project will somewhat exceed the underlying requirements for lots within an H-2-45 district, but will be appropriate to the Property's location in the St. Botolph area and compatible with the surrounding structures. Furthermore, if variances are granted by the Board from the Zoning Code requirements of §15-1 and §16-1 as requested, then such dimensions will be in conformance with the Code, as varied, and thus in conformity with Article 27D.

Finally, as required by §27-3, the proposed project is compatible with the goals of the comprehensive planning study and contemplated rezoning. §27D-1 sets forth the purposes of the Downtown IPOD, including to "channel new development toward underutilized sites", "encourage new residential development", and to "protect and enhance the architectural character of the downtown." The proposed project will contribute to the accomplishment of these particular purposes, and is compatible with the goals of the Downtown IPOD generally.

III.C. Conditional Use Permit for Stairway and Elevator Headhouses

The Board should grant permission for the erection of the two proposed stairway and elevator headhouses, first because these roof structures do not have the potential for damaging the uniformity of height or architectural character of the immediate vicinity, and thus the specific site is an appropriate location for the proposed headhouses. The proposed headhouses will extend to a height of 64.39 feet above grade. The height of the headhouses is lower than the 69 foot maximum height of the Building, which is the height of the Building's twin towers. The overall height of the Building and the height of the headhouses are compatible with the heights of the surrounding buildings, which are not uniform. Furthermore, these headhouses do not have the potential for damaging the architectural character of the immediate vicinity as they will be set well back from the roof edges of the Building, and thus will have little or no visual impact from street level.

Second, the use of the Building roof for headhouses will not adversely affect the neighborhood as the visual impact will be slight. Third, no hazard to vehicles or pedestrians is posed by the location of headhouses on the roof of the Building. Fourth, no nuisance will be created by the construction of these headhouses, and adequate and appropriate proposed facilities

will be provided for the proper operation of the proposed use. The stairway and elevator headhouses will be designed to meet all Building Code requirements. Furthermore, providing access to the roof decks by way of these headhouses will be much safer for the residents of the Building than access by way of roof hatches. Finally, this appeal does not relate to a Development Impact Project as defined in Article 26 of the Zoning Code, and therefore the requirements of §26-3 are inapplicable to the Property.

These and further reasons for the granting of the requested variances, the interim planning permit and the conditional use permit will be presented at the hearing.
2975g

AME: 32 Garrison St. Realty Trust
c/o Renaissance Properties
DDRESS: 321 Columbus Ave
Boston, MA

OCATION: 32 Garrison Street

PPLICATION NO. 1068

INSPECTIONAL SERVICES DEPARTMENT CITY OF BOSTON

DATE: Nov. 1, ~~October 27, 1987~~ ep 11/9

PURPOSE: Construct new 5 story apt. building and one story garage

DATE FILED: 09/10/87

WARD: 04 ZONE: H-2-45

RESIDENTIAL: x COMMERCIAL:

OUR APPLICATION IS HEREBY REFUSED AS SAME WOULD BE IN VIOLATION OF THE BOSTON ZONING CODE O WIT: CHAPTER 665, ACTS OF 1956 AS AMENDED: ARTICLES:

( ) Section 8-7 Use Item#
( ) Section 8-7 Use Item#
( ) Section 8-7 Use Item#
( ) Section 8-7 Use Item#
( ) Section 7-4 IN VARIANCE WITH A FORMER DECISION OF THE BOARD OF APPEAL.
( ) Section 9-1 EXTENSION OF STRUCTURAL CHANGE TO A NON-CONFORMING USE.
( ) Section 9-2 CHANGE IN A NON-CONFORMING USE.
( ) Section 10-1 OFF STREET PARKING IS NOT ALLOWED WITHIN THE FRONT NOR SIDE YARD.
( ) Section 14-1 LOT AREA IS INSUFFICIENT.
( ) Section 14-2 LOT AREA FOR ADDITIONAL DWELLING UNITS IS INSUFFICIENT/NOT PROVIDED
( ) Section 14-3 LOT WIDTH IS INSUFFICIENT.
( ) Section 14-4 LOT FRONTAGE IS INSUFFICIENT.
(X) Section 15-1 FLOOR AREA IS EXCESSIVE.
(X) Section 16-1 HEIGHT OF BUILDING IS EXCESSIVE.
ep (X) Section 16-8 RESTRICTED ROOF STRUCTURE DISTRICT.
(X) Section 17-1 USABLE OPEN SPACE IS INSUFFICIENT.
(X) Section 18-1 FRONT YARD IS INSUFFICIENT.
( ) Section 18-3 TRAFFIC VISIBILITY ACROSS CORNER IS INSUFFICIENT.
( ) Section 18-4 FRONT YARD (OTHER STREET) (S) IS INSUFFICIENT.
(X) Section 19-1 SIDE YARD IS INSUFFICIENT.
(X) Section 20-4 ep REAR YARD IS INSUFFICIENT.
(X) Section 21-1 SET BACK OF PARAPET IS INSUFFICIENT.
( ) Section 23-1 OFF STREET PARKING FACILITIES ARE INSUFFICIENT.
( ) Section 24-1 OFF STREET LOADING FACILITIES ARE INSUFFICIENT.
ep (X) ARTICLE 27 IPOD--INTERM PLANNING OVERLAY DISTRICT. Section 270-~~8~~ 7
(X) OTHER Section 23-9 Size of Spaces & manuverabil
ep (X) Section 20-3 Projections into rear yard.
ep ~~( ) Section 19-2 Sideyard of [illegible]~~

EFUSAL OF A PERMIT MAY BE APPEALED TO THE BOARD OF APPEAL WITHIN FORTY-FIVE (45) DAYS, URSUANT TO CHAPTER 665 OF THE ACTS OF 1956, AS AMENDED THROUGH APRIL 1963.

Ellen Pinkos 11/9/87
Ellen Pinkos

OR THE COMMISSIONER,
llen Pinkos
cting Zoning Admin.

FOR THE COMMISSIONER,
Russell Forsberg
Asst. Zoning Admin.

FOR THE COMMISSIONER,
Wilfredo Lopez
Asst. Zoning Admin.

ONING IS CLOSED TO THE PUBLIC ON WEDNESDAYS AND FRIDAYS.

Z603

Z604

BOSTON
INSPECTIONAL
SERVICES

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#00000604 32
ZONE $1100.00
#00000603 75
ZONE $1200.00

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B. Permits and Approvals Required

Building Permit	City of Boston
Landmarks Commission Approval	City of Boston
Flammable Gas Storage Permit	City of Boston
Sewer System Extension Permit	DEQE, Division of Water pollution Control
Asbestos Removal Permit	DEQE
Permits for Removal of Underground Storage Tanks	Board of Fire Protection
Zoning Variance	Zoning Board of Appeal
BRA Design Approval	Boston Redevelopment Authority
NPDES Permit (possible)	EPA

VII. APPENDICES

A. SUBMISSION REQUIREMENTS

SUBMISSION REQUIREMENTS

In addition to full-size scale drawings, 10 copies of a bound booklet containing all submission materials reduced to size 8½ x 11, except where otherwise specified, are required. For projects to be reviewed by the Boston Civic Design Commission, 10 booklets containing the applicant information and the design submission materials are required.

I. Applicant Information

- A. Development Team
    - 1. Names
        - a. Developer (including description of development or Chapter 121A entity)
        - b. Attorney
        - c. Project consultants
    - 2. Business address and telephone number for each
    - 3. Designated contact for each
    - 4. Description of current or formerly-owned developments in Boston
- B. Legal Information
    - 1. Legal judgements or actions pending concerning the proposed project
    - 2. History of tax arrears on property owned in Boston by development team
    - 3. Property Title Report including current ownership and purchase options of all parcels in the development site

II. Financial Information

- A. Full disclosure of names and addresses of all financially involved participants and bank references
- B. Nature of agreements for securing parcels not owned by prospective developer
- C. Development Pro Forma (form attached)

III. Project Area

A. Legal description of project area

IV. Project Design

A. Phase I Submission: Project Schematics

1. Written description of program elements and space allocation for each element

2. Neighborhood plan and sections at an appropriate scale (1" = 50' or larger) showing relationships of the proposed project to the neighborhood's:

   a. massing

   b. building height

   c. scaling elements

   d. open space

   e. major topographic features

   f. pedestrian and vehicular circulation

   g. land use

3. Black and white 8"x10" photographs of the site and neighborhood

4. Sketches and diagrams to clarify design issues and massing options

5. Eye-level perspective (reproducible line drawings) showing the proposal in the context of the surrounding area

6. Aerial views of the project

7. Site sections at 1" = 20' or larger showing relationships to adjacent buildings and spaces

8. Site plan at an appropriate scale (1" = 20' or larger) showing:

   a. General relationships of proposed and existing adjacent buildings and open space

   b. Open spaces defined by buildings on adjacent parcels and across streets

   c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features

   d. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas

   e. Survey information, such as existing elevations, benchmarks, and utilities

   f. Phasing possibilities

   g. Construction limits

9. Massing model at 1" = 100' for use in the Authority's downtown base model.

10. Drawings at an appropriate scale (e.g., 1" = 8') describing architectural massing, facade design and proposed materials including:

   a. Building and site improvement plans

   b. Elevations in the context of the surrounding area

   c. Sections showing organization of functions and spaces

11. Preliminary building plans showing ground floor and typical upper floor(s)

12. Proposed schedule for submission of design development materials

V. BRA Environmental Impact Assessment

A. Transportation Access Plan

The proposed scope of services for the Transportation Access Plan as attached is sufficient.

B. Shadow (Information should be provided during the schematic design stage.)

1. Shadow analysis plans should be submitted at a scale of 1" = 100'.

2. Shadow impact analysis must include net new shadows as well as existing shadows.

3. Initial shadow analyses must include shadow impacts for build and no-build conditions for the hours 9:00 a.m., 12:00 noon, and 3:00 p.m. conducted for four periods of the year at the vernal equinox, autumnal equinox, winter solstice, and summer solstice.

4. Additional shadow analyses may be required depending on the particular physical characteristics of the site including its solar orientation relative to public open spaces, pedestrian patterns and street patterns, and existing shadows in the area.

C. Excavation and Landfill

1. Written description including amount and method of excavation, dredging and filling proposed, and the existence of blasting and pile driving.

2. Analysis of sub-soil conditions, potential for ground movement and settlement during excavation, and impact on adjacent buildings and utility lines.

3. Vibration analysis of passing Southwest Corridor trains.

D. Groundwater

1. List of measures used to ensure the groundwater levels will not be lowered during or after construction, if applicable.

2. Engineering analysis of the impact of development on groundwater, surrounding structures, wooden piles and foundations.

E. Solid and Hazardous Wastes/Materials

1. A list of any known or potential contaminants on site together with evidence of the recording with the Registry of Deeds of the disposal of hazardous wastes on the site, pursuant to the M.G.L., Chapter 21C, if applicable.

2. Existence of buried gas tanks on site

3. Estimate of potential trash generation and plans for disposal

F. Construction Impacts

1. Description of construction staging areas
2. Availability of construction worker parking
3. Potential dust generation and mitigation measures to control dust emissions
4. Permits from Air Pollution Control Commission for sand blasting, if appropriate
5. Potential noise impact and measures to minimize noise levels
6. Truck traffic and access routes
7. Pedestrian safety

G. Historical Landmarks

1. Description of the project site location in proximity to a National or Massachusetts Register site or district or Landmark designated by the Boston Landmarks Commission.
2. Identification of Boston Landmarks Commission ratings for existing buildings.

H. Air Quality

1. Estimation of emissions from any parking garage constructed as part of the project.
2. Description and location of building/garage air intake and exhaust systems and evaluation of impact on pedestrians.
3. For residential projects, evaluation of the ambient air quality to determine conformance with the National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency.

I. Utility Systems

1. Estimated water consumption and sewage generation from the project
2. Description of the capacity and adequacy of water and sewer systems and an evaluation of the impacts of the project on these systems

3. Identification of measures to conserve resources, including any provisions for recycling

VI. Historical Landmarks

32 Garrison Street is located within the Saint Botolph Area Architectural Preservation District. The Project Impact Report should describe the historic/architectural qualities of the property and the district, analyze the effects of the proposed new construction and evaluate measures intended to mitigate any potential adverse impact the project may have on the buildings and district. The proponent shall review the new construction with the Boston Landmarks Commission, and shall include a summary of the reviews in the Project Impact Report.

VII. Public Benefits

A. Development Impact Project exaction, specifying amount and method of linkage contribution (housing payment or housing creation)

B. Increase in tax revenues, specifying existing and estimated future annual property taxes

C. Childcare plan

D. Other public benefits

VIII. Regulatory Controls and Permits

A. Existing zoning requirements, calculations, and any anticipated zoning requests

B. Anticipated permits required from other local, state, and federal entities with a proposed application schedule

C. For projects requiring compliance with the Massachusetts Environmental Policy Act (MEPA), copies of the Environmental Notification Form, Certificate of the Secretary of Environmental Affairs, and Environmental Impact Report, if required

D. Other applicable environmental documentation

KC9/AA

IX. Community Groups

A. Names and addresses of project area owners, displaces, abutters, and also any community groups which, in the opinion of the applicant, may be substantially interested in or affected by the proposed project

B. A list of meetings proposed and held with interested parties

DRAFT SCOPE OF WORK
TRANSPORTATION ACCESS PLAN
32 GARRISON STREET CONDOMINIUM PROJECT
SOUTH END, BOSTON

Background:

The scope below reflects concerns expressed at a meeting held between Andy McClurg, Owen Donnelly, and Jane Howard on November 13, 1987. The primary transportation issue involved with this project is the relationship of the proiject to surrounding developments, especially the Musician's Building across the street, for which Renaissance Properties has offered a Letter of Intent to Purchase.

The proposed scope for the transportation impact study and access plan is:

1. Introduction and Project Description
2. Existing Conditions
3. Future Trip Generation and Parking Demand
4. Parking Supply and Management Issues
5. Construction Activity
6. Monitoring

B. PROJECT NOTIFICATION FORM

BOSTON REDEVELOPMENT AUTHORITY
DOWNTOWN ZONING INTERIM PLANNING OVERLAY DISTRICT
PROJECT NOTIFICATION FORM

I. Summary

A. Project Identification

1. Project Name: 32 Garrison Street

2. Address Location: #32, at the southernmost end of Garrison Street, Boston, Massachusetts

3. Property Owner: 32 Garrison Street Realty Trust

4. Developer:
   Renaissance Properties
   321 Columbus Avenue
   Boston, MA 02116
   (617)536-2700

5. Developer's Representative:

6. Architect:
   Notter, Finegold & Alexander
   77 North Washington Street
   Boston, MA 02114
   (617)227-9272

7. Legal Counsel:
   Choate, Hall & Stewart
   53 State Street
   Boston, MA 02109
   (617)227-5020

8. Estimated Commencement: March, 1988
   Estimated Completion: June, 1989

9. Approximate Cost: $18,800,000

10. Status of Project Design: Working Drawings

11. Is this project subject to Boston Zoning Code, Article 31? YES

B. Narrative Project Description:

The proposed site is a 29,328 square foot lot, with dimensions of approximately 179 by 165 feet. The MBTA Southwest corridor structure abuts the southern side of the site, and a condonminium development (30 Garrison Street) is presently under construction immediately adjacent to the east property line. Across the alley on the north side is the back of 70 St. Botolph St., housing for the elderly.

Currently on the site is a two story warehouse structure (see accompanying photos). The developer has received approval for the demolition of this warehouse from the Boston Landmarks Commission. A development of condominium housing is proposed.

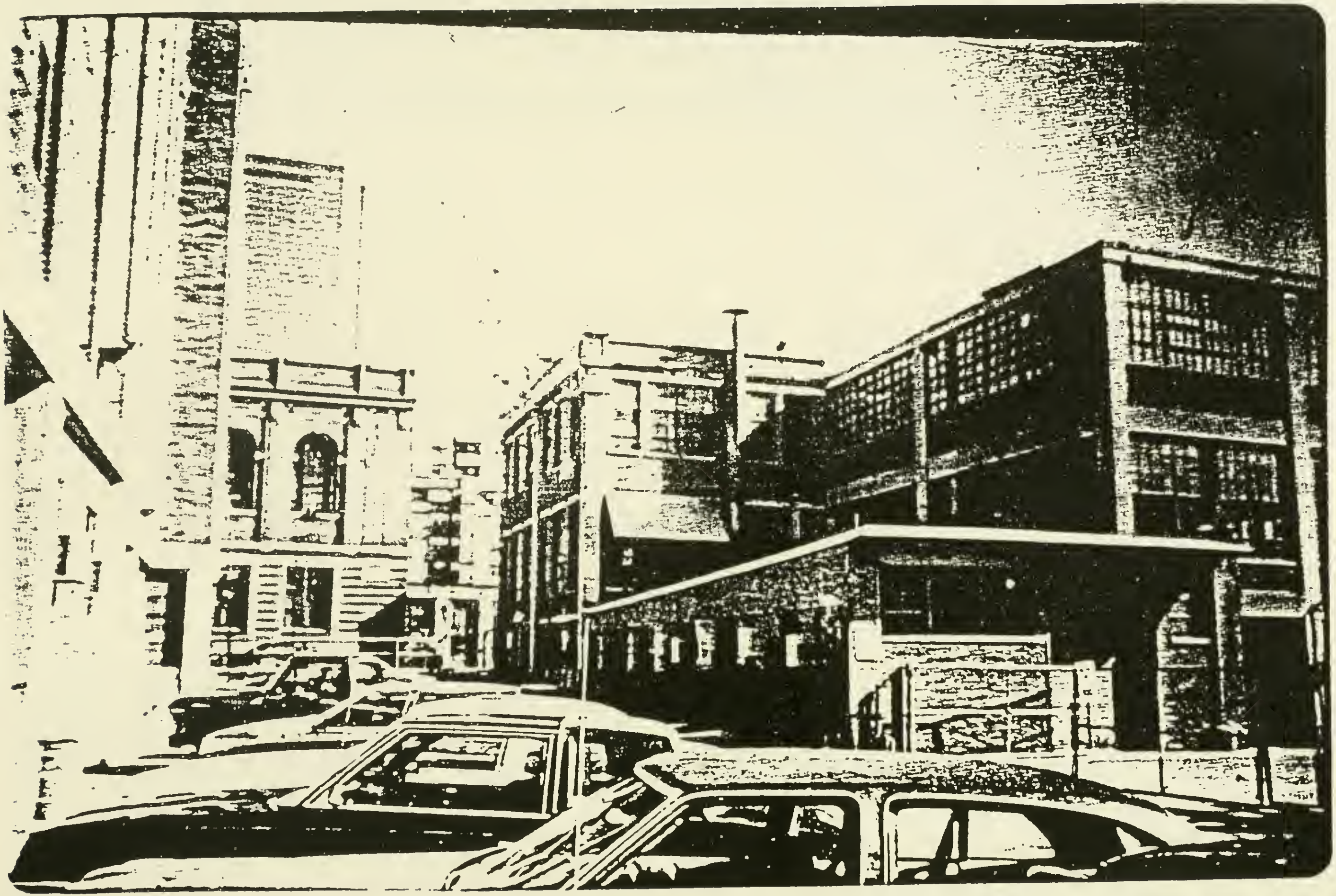
We have designed a total of 74 units, which will primarily skewed to larger units of 2 and 3 bedrooms. The configuration breakdown is as follows:

14	1 bedroom (19%)
48	2 bedroom (65%)
12	3 bedroom (16%)

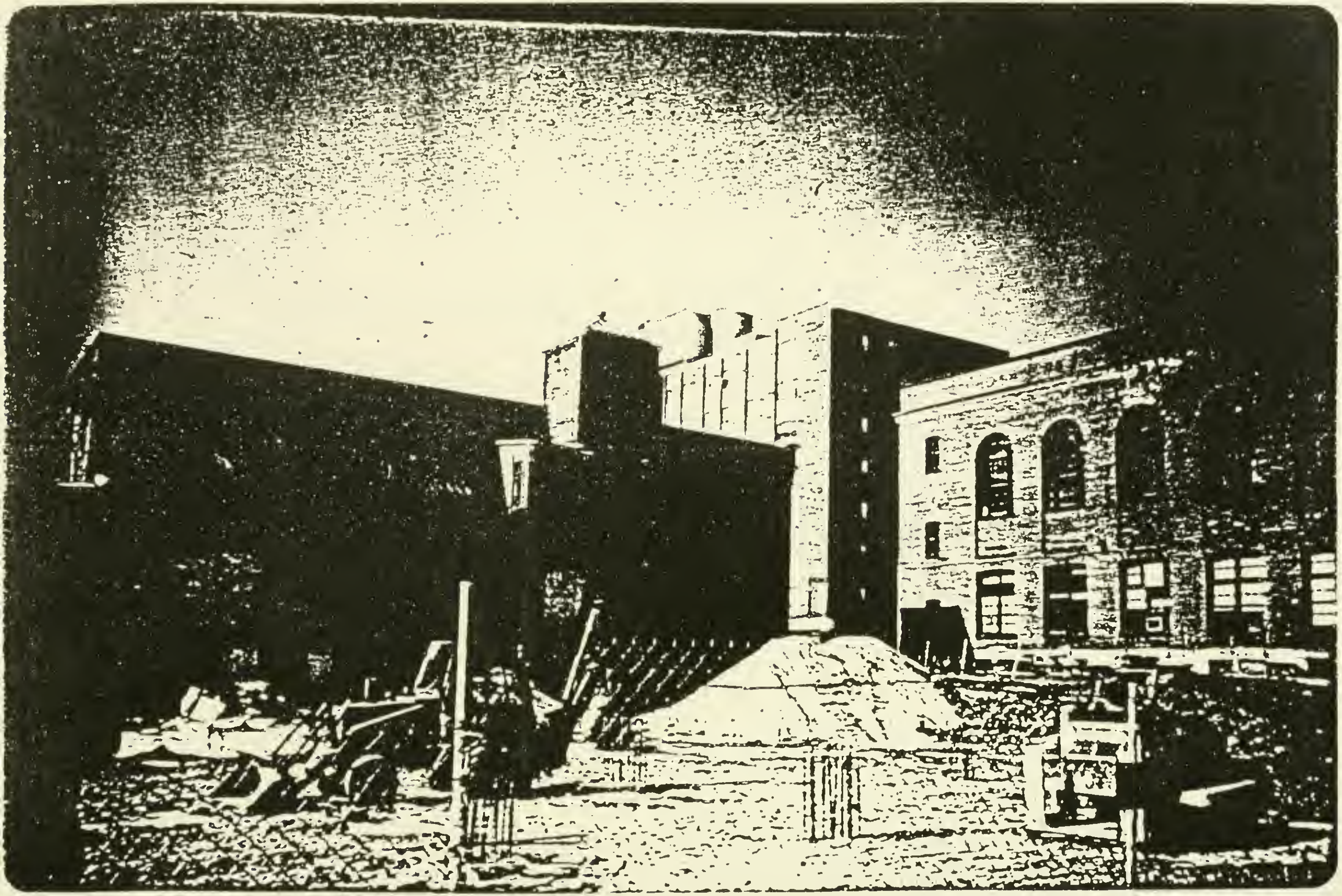
A below grade garage of 76 spaces will also be constructed. Gross square footage in this development will be 86,494 square feet exclusive of garage. The total square footage, including garage, will be 113,394 gross square feet.

The design scheme reflects a five story brick structure of o traditional rowhouse design, built to surround a period Victorian landscaped courtyard. The development will make use of bows, bays, and lintels which reflect similar architectural features commonly found in this Back Bay neighborhood. The development plan incorporates a pedestrian passageway which extends from Garrison Street in the Back Bay through to the MBTA cover which borders the entrance to the South End.

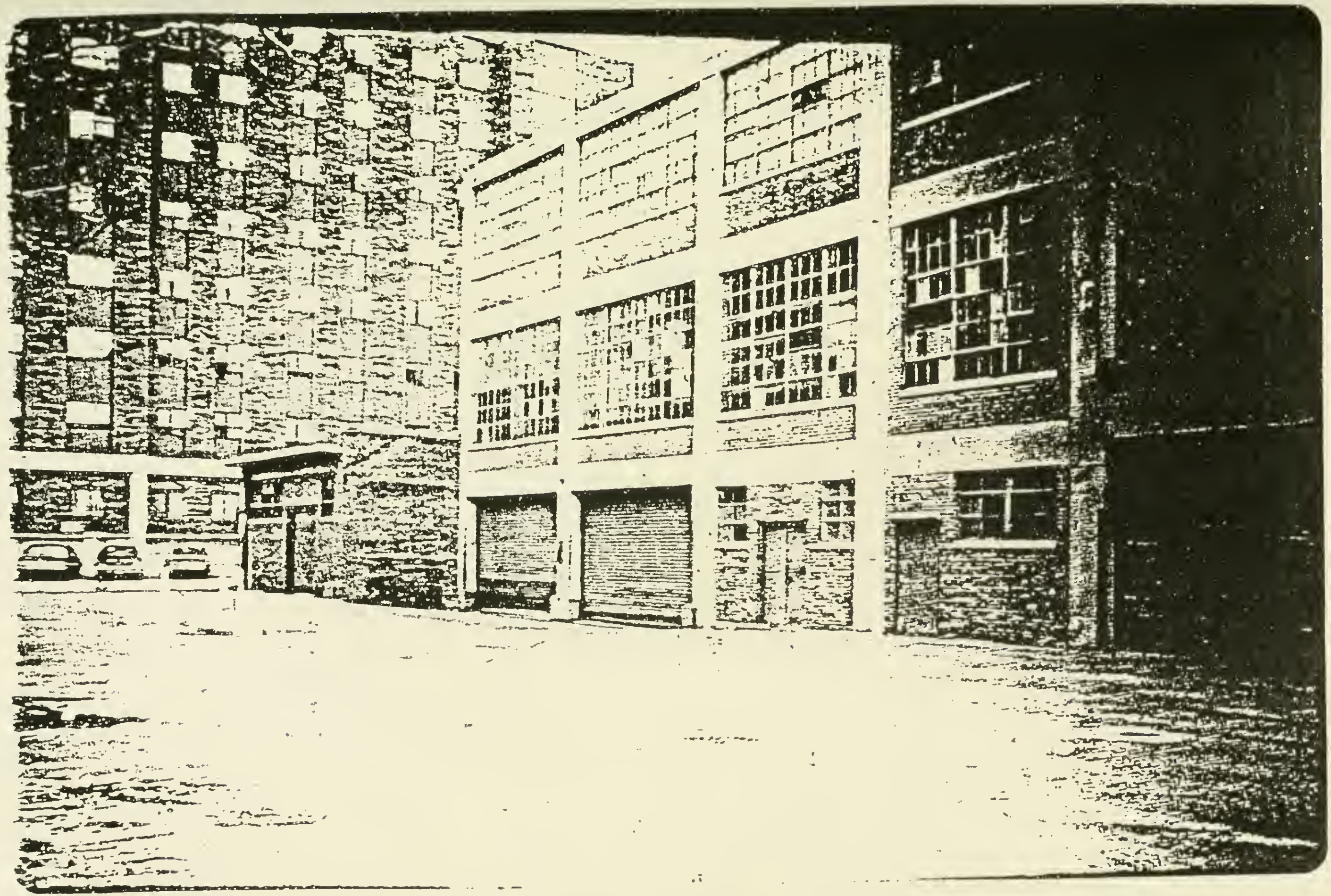
Extensive consultation with both the BRA and the developers/architects of the contiguous parcel at #30 Garrison Street have resulted in a cohesive landscaping and exterior design scheme between the two parcels.



Existing Lot

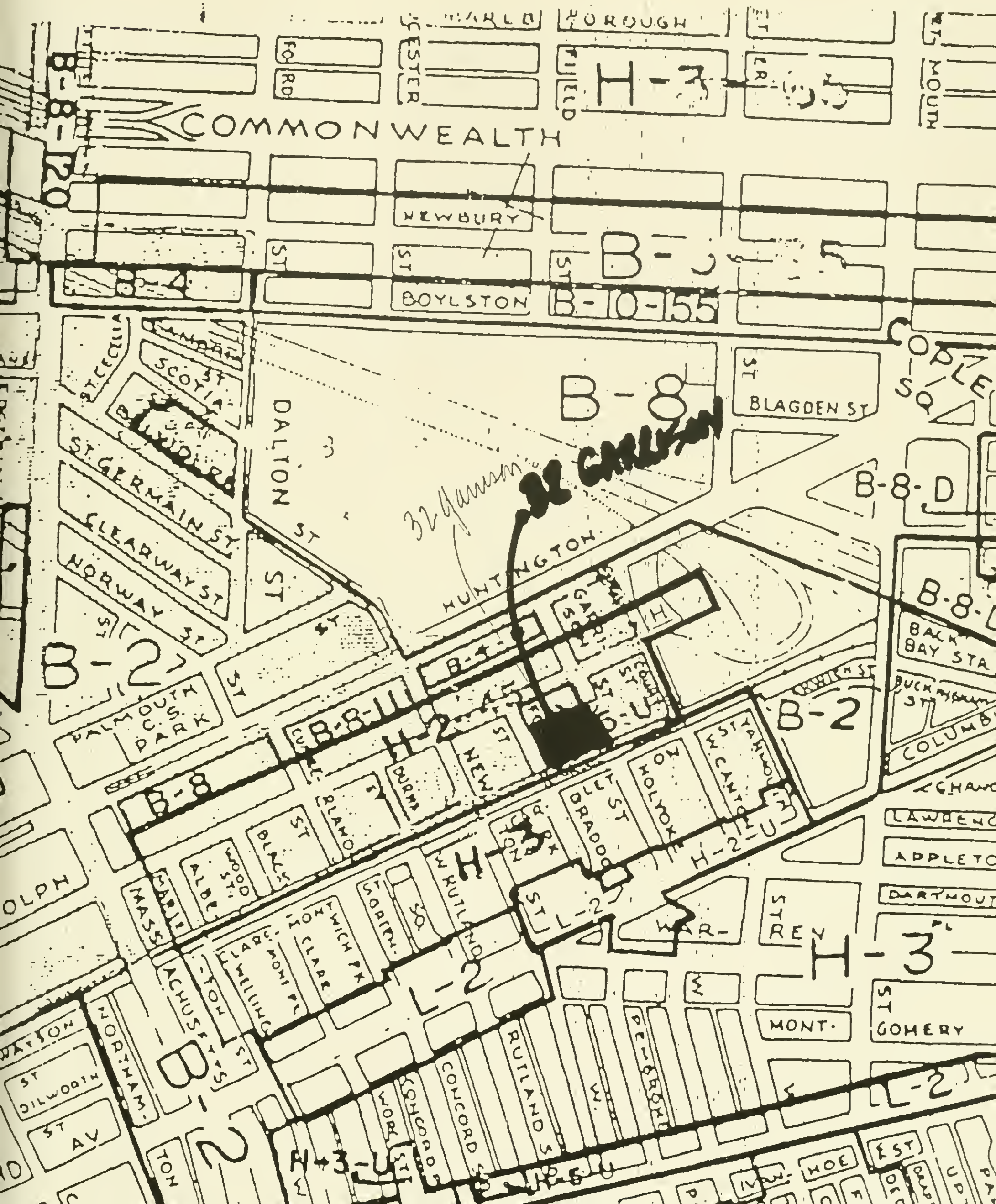


Existing lot



Existing lot

CATION OF 32 GARRISON STREET, BOSTON, MA 02115



B. Dimensions

Building Height: 53.4 feet above mean grade level

Number of Stories: 5

Square Footage of Lot: 29,328 sq. ft.

Rear Yard: 4 feet on tower

Loading Bays: No off-street loading provided

Parking Facilities: 76-78 below grade spaces

Building Gross Square Footage: 86,494 sq. ft.

Building Net Square Footage: 76,024 sq. ft.

F.A.R: 2.95

C. Uses

74 Condominiums are proposed for strictly residential use.

C. List Federal or State agencies from which permits or other actions have been or will be sought:

DEQE DIVISION OF WATER POLLUTION CONTROL	PERMIT FOR SEWER CONNECTION
BOARD OF FIRE PROTECTION	REMOVAL PERMITS FOR UNDERGROUND STORAGE TANK
EPA	NPDES PERMIT (IF STILL REQUIRED)

D. List any zoning relief required for this project (including any zoning variance, exception, conditional use permit, interim planning permit, zoning map or text change, or Development Impact Project Agreement).

[illegible]

Section 15-1	Floor area is excessive.
Section 16-1	Height of building is excessive.
Section 16-8	Restricted roof structure district.
Section 17-1	Usable open space is insufficient.
Section 18-1	Front yard is insufficient.
Section 19-1	Side yard is insufficient.
Section 20-4	Rear yard is insufficient.
Section 21-1	Set back of parapet is insufficient.
Article 27D, Section 27D-7	Interim Planning Overlay District.
Section 23-9	Size of spaces and maneuverability.
Section 20-3	Projections in rear yard.

[illegible]

E. List any governmental agencies or programs from which financial assistance for this project is being sought:

None.

II. Project Description

A. Attach map showing location of project; survey if available; site plan and architectural rendering if available.

III. Assessment of Development Review Components

(Note anticipated direct and indirect environmental impacts if any, for each review component. If significant ~~a~~adverse impact is considered likely to result, please explain. Positive impact may also be noted.)

A. Transportation Components

1. Traffic Management

No significant increase in downtown travel volumes or adverse effect on intersection capacities or pedestrian circulation is anticipated. A complete transportation access plan is on file with the Department of Transportation and the BRA.

2. Parking management

No parking spaces will be sold to individual owners.

3. Construction Management

Methods will be utilized to minimize effects on the surrounding area from truck movements, deliveries, and construction employee parking. As the site is at the end of a dead end street, we anticipate that disruption to the neighborhood will be minimal.

B. Environmental Protection Component

1. Wind

We do not feel that this five story development will affect current wind conditions in the project area. Primarily, this is due to the limited overall height of the structures, and the extensive open space provided by the interior courtyard, proposed setbacks, and proximity to the open space pertaining to the Southwest Corridor.

2. Shadow

No significant new shadows will be created by this development. Shadows cast by the building generally fall on the alley to the rear of the Follen Street residences and on public Alley #454, not on public open space.

3. Daylight

The new five story building will have little additional effect on the on the extent of daylight in the project area.

4. Solar Glare

Materials used in the construction of 32 Garrison Street will be similar to those used in surrounding buildings, i.e. brick and stone. Therefore, there will be negligible solar glare effect.

5. Air Quality

Short-term air quality impacts from fugitive dust may occur during construction. Methods such as wetting down will be used to minimize fugitive dust. There are no long-term air quality related impacts from this residential development.

6. Water Quality

Development of property is not expected to result in significantly increased runoff to that generated by the existing warehouse, which we propose to demolish.

7. Flood Hazard Zones/Wetlands

The project area is not located in a flood hazard zone or wetland.

8. Groundwater

The depth of the water table is reflected by data we obtained by performing borings on the site. It was observed to be approximately at El. +8(BCB).

9. Geotechnical Impact, including Subsoil Conditions:

The approximate existing ground surface is at an elevation of +16 feet (BCB). Subsurface soil conditions are fill to a depth of -2 to -3 feet, at which point borings have revealed organic silt to a depth of -20 feet. Peat, sand and, finally, silty clay follow to a depth of at least -30 feet. Borings revealed 10-11 feet of glacial fill at approximately El. -111. Bedrock was cored from approximate depths of 135-144 feet. All dimensions will be verified during design of the excavation support system and/or during construction.

10. Solid and Hazardous Wastes

    The solid waste generated by this project will be handled through a contract disposal service.

11. Noise

    Noise will be generated during the construction phase. Steps will be taken to minimize anticipated construction-related noise. Long-term noise effects at the site are expected to be minimal.

12. Construction Impact, Proposed Safety Features, and Construction methodology

    As the design progresses, construction methods will be identified.

13. Rodent Control

    A rodent control program will be implemented during the construction phases of this project.

C. Urban Design Component

1. Architectural Compatibility

   In keeping with the historic character of the St. Botolph Street neighborhood, the proposed building will be designed in scale with, and with reference to, surrounding structures. In particular, materials similar to those found on existing facades will be the primary component of the structure. Traditional Victorian detailing (bays, bows and lintels) appropriate to this neighborhood will be used.

2. Relationship to Subdistrict Urban Design Features

   We have worked closely with, and continue to work closely with, the St. Botolph Area Architectural District Commission to ensure that appropriate landmark guidelines are met.

3. Quality of Pedestrian Environment

   A pedestrian passage incorporated into the building structure will act as a new connection between the South End and the Back Bay at Garrison Street.

4. Consistency with Established Design Guidelines

The architects have met several times with BRA staff, with the Boston Landmarks Commission, and with appropriate neighborhood groups to discuss and review project plans. So far, the input from the BRA staff has been useful and positive. The project staff will continue to work with the BRA and other city agencies as the design process advances.

D. Housing Preservation Component

1. Relationship of Project to Creation of Affordable Dwelling Units

The proposed project will result in the creation of 74 new dwelling units at 32 Garrison Street. The project will be linked to the creation of affordable units to be constructed by the developer along the Washington Street Corridor, which will be in full compliance with the suggested 20% off site affordability requirement.

2. Payments in Lieu to Neighborhood Housing Trust

None

E. Historic Resources Component

1. Impact on Objects, Structures, Buildings, Sites, or Districts of Historic, Architectural, Archeological or Cultural Distinction.

The project is located within the St. Botolph Area Architectural District, as well as the Interim Planning Overlay District.

Brick and stone will be the primary facade treatment. Window treatments will be consistent with those specified by Landmark guidelines. Traditional raised 1/2 level stoops will echo the rhythm of those Victorian structures lining the adjacent St. Botolph Street. Cast iron fencing, balconies and a period fountain will accent the square. The building will be anchored at two corners by appropriate turrets, similar to those which are found extensively throughout the neighborhood.

2. Landmark Status of Property (Boston Landmark, State Register of Historic Places, National Register of Historic Places)

   All construction will be new.

F. Infrastructure Systems Component

1. Anticipated water consumption, if known.

   Unknown

2. Anticipated electricity consumption, if known.

   Unknown

3. Anticipated sewage generation, if known.

   Unknown

4. Anticipated energy requirements, if known.

   Unknown

Coordination with Other Governmental Agencies

Note anticipated jurisdiction of the following:

A. Boston Landmarks Commission Review

   Review with the staff of this Commission has been underway for several months.

B. Architectural Access Board Requirements

   Barrier free access to this project will be designed to comply with the requirements of the AAB.

C. Other

   N/A

V. Proponent's Certification

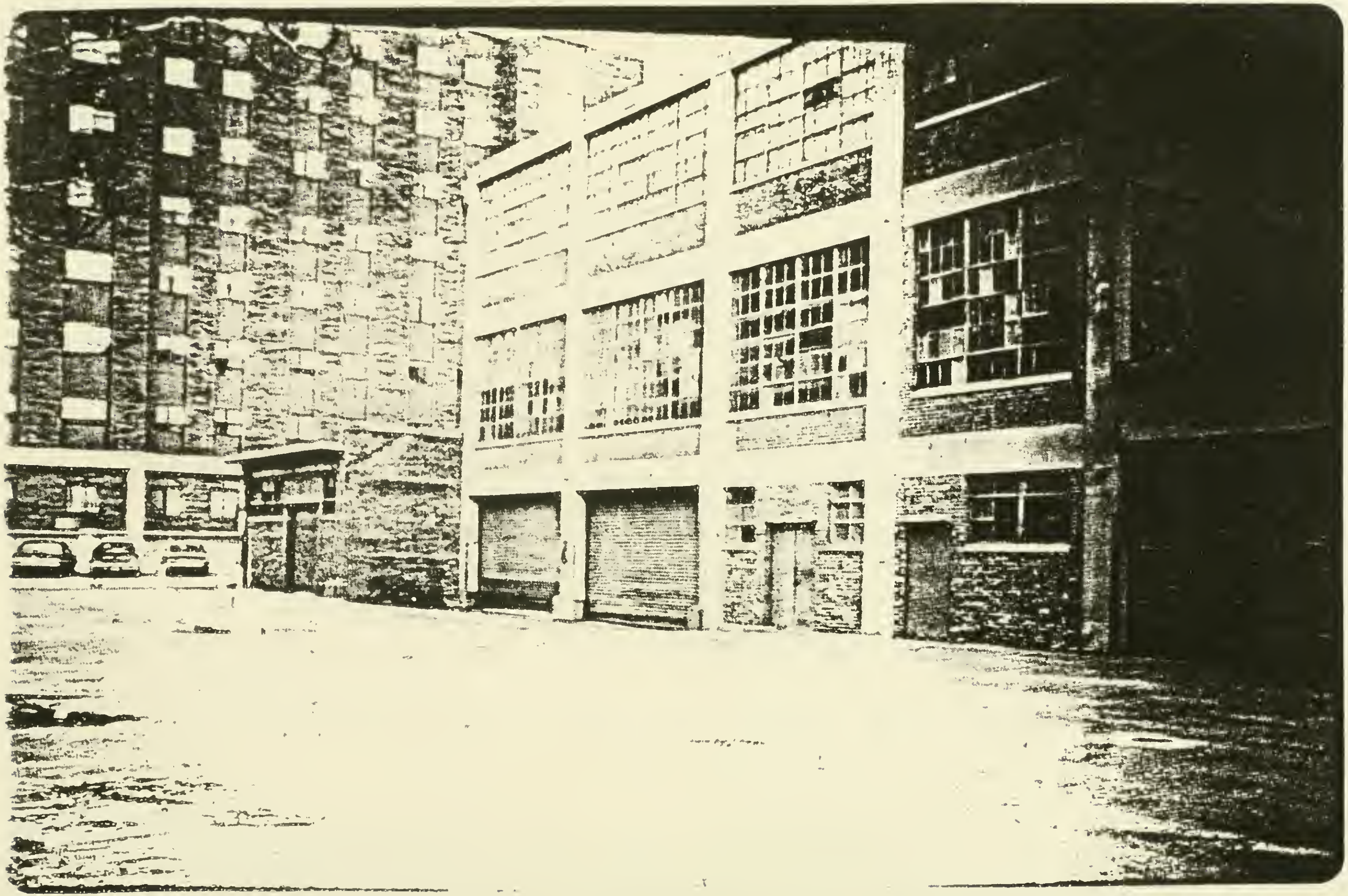
This form will be circulated to all agencies and persons as required by Boston Zoning Code, Article 31, Section 31-5 (1).

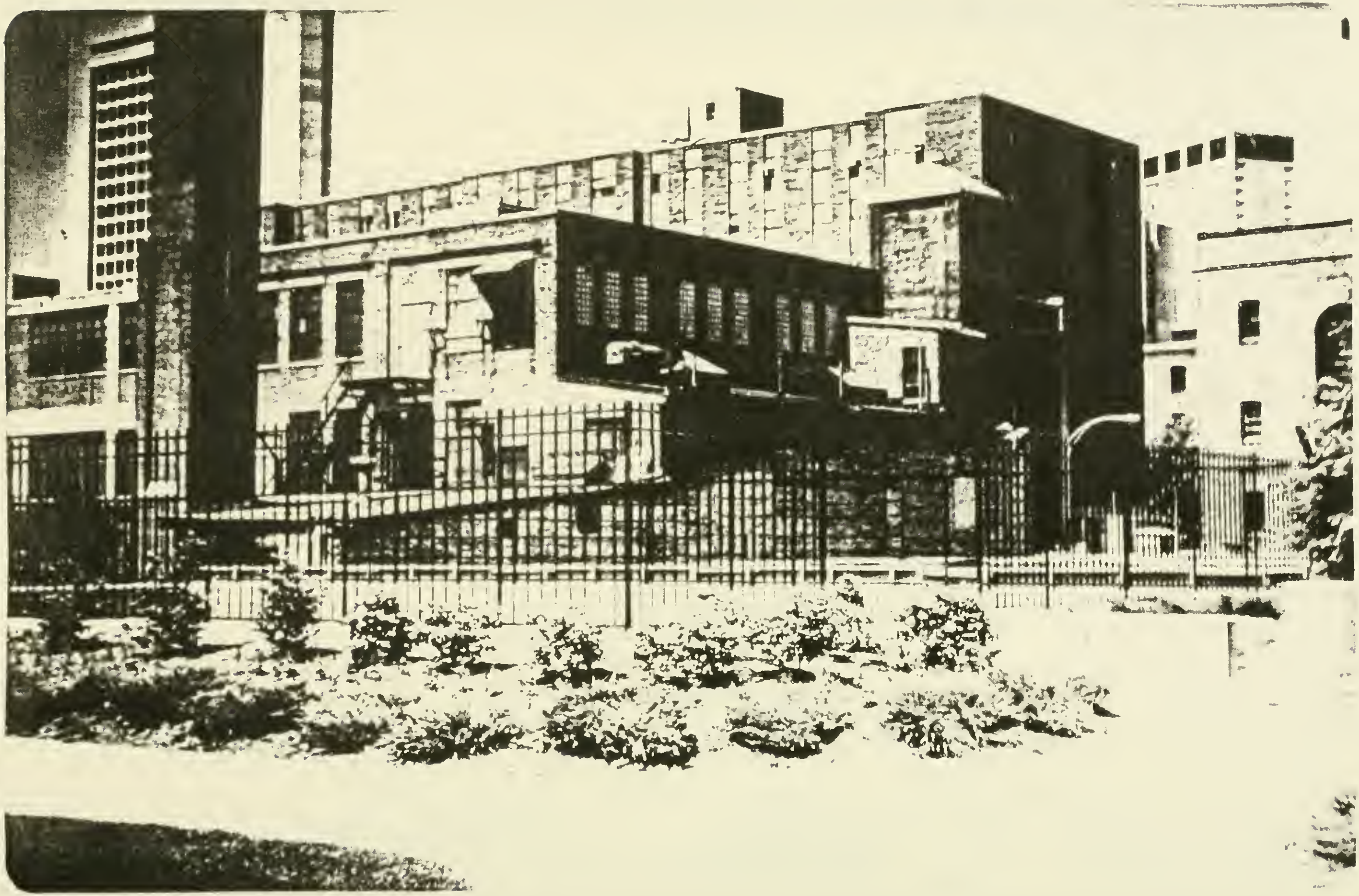
12/10/87
Date

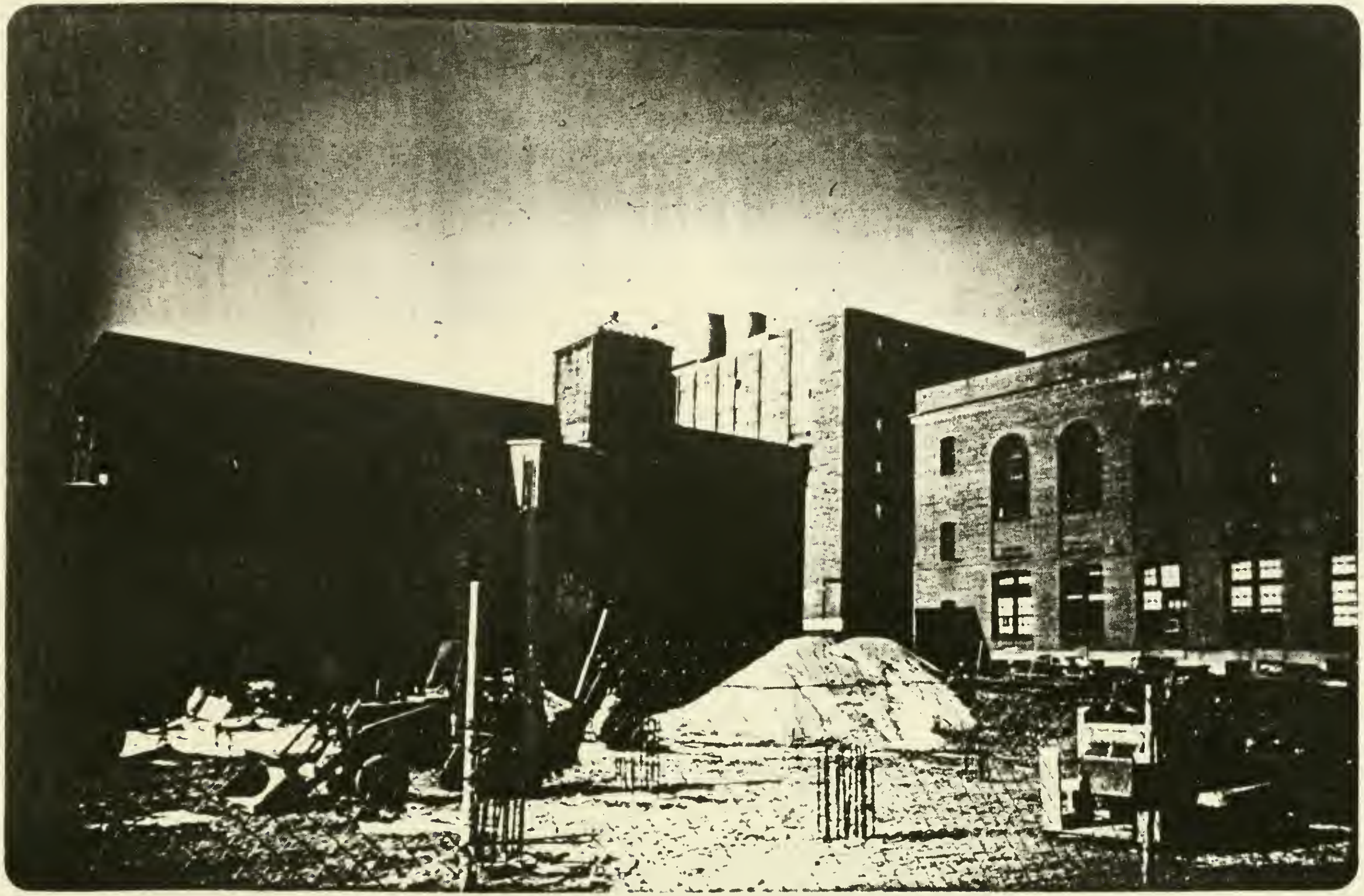
Elizabeth Mcloughlin
Elizabeth H. Mcloughlin

Renaissance Properties
321 Columbus Avenue
Boston, MA 02116
(617)536-2700

C. PHOTOS OF EXISTING SITE







D. GEOTECHNICAL REPORT/FOUNDATION RECOMMENDATIONS

The following Geotechnical Report
was prepared by:

GEI
1021 Main Street
Winchester, MA 01890

1. INTRODUCTION

1.1 Purpose and Scope

This report presents the results of the subsurface investigation and our recommendations for foundation design of the proposed condominium development at 32 Garrison Street.

Our scope of work for this project included the following:

1. Search for and evaluate existing data available on subsurface conditions and the foundations of existing nearby buildings and the MBTA structure near the site.

2. Engage a boring subcontractor to drill borings at the site, install an observation well to monitor ground water levels, and obtain samples suitable for laboratory testing.

3. Perform laboratory tests including strength, consolidation and index tests to establish soil properties at the site.

4. Analyze the boring and laboratory data and perform engineering analysis to develop recommendations for foundation design and geotechnical aspects of the proposed building construction.

1.2 Authorization

The work performed for this report was authorized by Renaissance Properties by a signed copy of our proposal dated May 20, 1987, and by a letter from Renaissance Properties dated June 17, 1987.

1.3 Project Personnel

The following key people at GEI performed the services related to this project:

Gonzalo Castro	Principal-in-Charge
Samson Liao	Project Manager
Nancy L. Schoepf	Engineer
Kenneth A. Pidgeon	Engineer

2. SITE AND PROJECT DESCRIPTION

2.1 Site Description

The site for the proposed development is located in Boston as shown in Fig. 1, Site Location Plan. The site is at the end of Garrison Street as shown in Fig. 2, and the dimensions of the site are approximately 179 feet by 165 feet. True north is approximately 50° from an orientation parallel to Garrison Street. In this report, orientations of structures near the site and other features will be referred to called north which is parallel to Garrison Street, as indicated in Fig. 2.

As shown in Fig. 2, a group of one- to two-story building facilities belonging to the Christian Science Church currently occupies the eastern half of the site. The western portion of the site is a relatively flat asphalt paved area in which the elevation varies approximately from El. +12.9 to El. +13.8. Along the alleyway on the north side of the site, the elevation varies from approximately El. +13.5 at the west end to approximately El. +18 at the east end. All elevations described to in this report are referenced to the Boston City Base (BCB) datum.

The MBTA Southwest Corridor structure abuts the southern side of the site, and a condominium development (30 Garrison Street) is presently under construction immediately adjacent to the east property line. Across the alley on the north side is the back of 70 St. Botolph Street, housing for the elderly. The Shakespeare Theatre is diagonally across the alley from the northeast corner of the site. Across an alley on the west side of the site is a group of four- to five-story residential brick buildings with partially below grade ground floor levels.

2.2 Project Description

The proposed development at 32 Garrison Street will be a five-story structure with a central courtyard area and one level of underground parking. The top of the basement slab level is currently planned to be at El. +7'10" (BCB).

As provided by Aberjona Engineering, the column loads will be in the range of 48 kips to 378 kips dead load with total loads (dead plus live loads) ranging from 52 kips to 548 kips per column. The sum of all the column loads is approximately 15,500 kips dead load and 22,000 dead plus live load. It is planned to have a structural basement floor slab approximately 1 foot thick that will be supported by a system of grade beams. Based on preliminary design information provided by Aberjona Engineering, the grade beams are expected to be approximately 4 feet deep (below the top of the slab) with the resulting bottom of the grade beams at El. +3'10".

3. SUBSURFACE CONDITIONS

3.1 Subsurface Exploration Program

Five borings were drilled at the locations shown in Fig. 2 between July 6 and July 10, 1987. Two additional borings were drilled on October 10 and 11, 1987. The driller's logs for these borings are contained in Appendix A. A ground water observation well was installed in Boring B2 to a depth of 22 feet. Water level readings were also obtained from two wells (denoted as OW-A and OW-B and located as shown in Fig. 2) which were previously installed by others.

3.2 Laboratory Testing

Soil samples obtained from the borings were brought to our laboratory for further inspection and testing. The testing consisted of four consolidation tests, five unconsolidated undrained compression tests, and associated index tests, including Atterberg limits, natural water content determinations and a specific gravity test. Results of the laboratory tests were used in developing our recommendations for foundation design. The laboratory test data are presented in Appendix B.

3.3 Soil Conditions

The soil conditions at the site are schematically illustrated on the cross-sections shown in Fig. 3. The locations of the cross-sections are shown on Fig. 2. The soil conditions are known only at the boring locations, and therefore the actual soil conditions between the borings may differ from those shown in the figures and described in this report.

An asphalt pavement a few inches thick generally covers the ground surface which varies from approximately El. +13 to El. +18. General descriptions of the soil strata encountered below the paved asphalt surface in the borings are presented below, beginning at the ground surface.

Miscellaneous Fill

Fill was encountered from the bottom of the pavement to depths varying from 16 feet to 22 feet (El. -4 to El. -2). The fill consists of silty sand, organic silty sand, and gravel with occasional fragments of brick and miscellaneous debris. The standard penetration resistance (N-values) of the fill generally varies from N=0 (weight of rods) rod to N=43.

Obstructions were encountered in the fill in Borings B2A and B4A. These obstructions may have been boulders or granite blocks in the fill.

Organic Silt

A 14 foot to 18 foot thick layer of organic silt underlies the fill. The bottom of the organic silt varies from El. -20 to El. -21 (BCB). The consistency of the organic silt varies from soft to medium stiff, with N-values in the organic silt varying from N=0 (weight of rods) to N=6. This organic silt contains clay and occasional shells, lenses of sand and/or peat fibers.

Peat

A 1 foot to 3 foot thick layer of peat was encountered below the organic silt. The elevation of the top of the peat varies from El. -20 to El. -22 (BCB).

Silty Fine Sand

Below the peat layer, a 1 to 2 foot thick layer of silty fine sand was encountered in Borings B1 and B2. Because this layer is relatively thin, this layer is probably present at the other boring locations but may have been missed during the sampling process.

Silty Clay

A gray silty clay was encountered below the peat and/or the silty sand layers. The top of the clay layer varies from El. -22 to El. -26. The consistency of the clay ranges from stiff to very stiff (N=13 to N=24) within the top 7 feet to 10 feet of the clay (to approximately El. -32) and medium stiff to very stiff (N=6 to N=21) from El. -32 to El. -50. Below this elevation, the clay becomes softer with depth and in general below El. -85 the clay is unable to sustain the weight of the drilling rods. A gravelly zone within the clay was encountered in Boring B2A from approximate depths of 92 feet to 94 feet.

Glacial Till

Glacial till was encountered in Boring B2A at a depth of approximately 124 feet (El. -111). The thickness of till is approximately 10 feet to 11 feet and consists of a mixture of sand, angular gravel, silt and clay. Standard penetration test N-values in the till are over 100.

Bedrock

Bedrock was encountered in Boring B2A at a depth of approximately 134 feet (El. -123) and was cored from approximate depths of 135 feet to 144 feet. The rock consists of a gray argillite with moderate to severe jointing and fracturing to a depth of approximately 140 feet with a RQD (rock quality designation) value of 8% in the first run (from 135 feet to

140 feet). In the second run from approximately 140 feet to 144 feet, the Argillite was less fractured with a RQD of 61%.

3.4 Ground Water Conditions

The ground water levels at the site were measured in the observation well installed by GEI and two other wells installed by others. The ground water elevation was found to be between El. 7.4 and El. 7.7 when measured on July 15, 1987. The ground water level at the time of construction may be different due to seasonal fluctuations. Ground water records from 1979 to the present have been maintained by the MBTA prior to and during construction of the Southwest Corridor. There are indications that the ground water level at a well on the site has varied between El. +5 to El. +10 (BCB) during that period.

3.5 Foundations of Nearby Structures and Underground Utilities

3.5.1 General

The foundations of nearby structures and underground utilities were evaluated by reviewing data from the MBTA, the Boston City Engineer's Office, the Boston Public Library, and data provided by Notter, Finegold & Alexander. The conditions described in this section of the report are based on limited data available to us. No detailed surveys were conducted to verify these conditions. The actual foundation conditions of some of the buildings and underground utilities that have an impact on, or are potentially affected by the construction should be verified during the design of the excavation support system and/or during construction, as recommended in Section 4.5.

3.5.2 Existing Buildings on Site

The existing buildings on site consist of an original two- or three-story structure that was constructed circa 1919 and one-story and three-story additions built circa 1949. The buildings are partially supported on wood piles (recorded to be 30 feet long) and concrete caissons of unknown size.

3.5.3 30 Garrison Street

The building at 30 Garrison Street is currently under construction and is planned to be four- to five-stories tall when completed. Based on plans provided to us by Notter, Finegold & Alexander, the foundations for the building consist of belled caissons with the bells constructed within the upper part of the gray silty clay stratum. Based on discussions with parties involved on the 30 Garrison Street project, the original intent was to excavate the caisson bells in the organic silt above the clay. However, because of the presence of a thin silty sand layer between the organic silt and the clay,

and the water inflow from the layer, belling in the silt proved impractical. As a result, the caissons had to be extended deeper and the sizes of the shafts and the bells had to be increased.

Based on a drawing provided to us, it appears that the bells of some of the caissons may extend beyond the property line of 30 Garrison Street into the 32 Garrison Street property. The maximum extension into the 32 Garrison Street property line appears to be about 6 inches. This should be taken into account when considering clearance requirements for driving sheet piles for excavation support or the planning of caisson locations and bell sizes.

The basement floor was constructed as a slab on grade with the top of the slab at approximately El. +12. There are grade beams 4 feet deep under parts of the slab, but the beams are not continuous throughout the building.

3.5.4 Shakespeare Theatre Building

The Shakespeare Theatre Building consists of a two-story structure with high ceilings and an adjacent structure of the same height but with three stories. Based on information available to Notter, Finegold & Alexander, the building is supported on wood piles with the tops of the piles at El. +5 (BCB).

3.5.5 70 St. Botolph Street

The building at 70 St. Botolph Street across the north alley from the site is an eight-story building constructed circa 1972. The plans for the building indicate that the foundations consist of belled caissons bearing in the silty gray clay at approximately El. -20 to El. -22 (BCB).

3.5.6 Follen Street Residences

The buildings across the west alley on Follen Street are four- to five-story (including basement) structures which were constructed circa 1888. The foundations consist of wood piles, but there are no records available regarding the lengths or the cutoff elevations of the piles.

3.5.7 Southwest Corridor/MBTA Structure

The Southwest Corridor/MBTA Tunnel on the south side of the 32 Garrison Street property was constructed in the early 1980's using the slurry wall method of construction. The concrete wall of the structure, adjacent to the 32 Garrison Street site, extends to a significant depth (to approximately El. -49, BCB) below the top of the silty clay at the site. According to Mr. William Quinlan of the MBTA, the temporary earth support system used during construction employed internal bracing rather than tieback anchors.

3.5.8 Underground Utilities

A drawing prepared by Allen, Demurjian, Major & Nitsch titled Property and Topographic Plan, dated September 1987 shows the locations of various underground utilities on or adjacent to the site. Along the north alley, there are numerous utilities including sewer, electrical, telephone and cable TV. Along the west alley, there is a sewer line that runs approximately north to south but crosses the 32 Garrison Street property line. Under the west half of the site, not occupied by buildings, there are numerous sewer lines and possibly a buried fuel oil tank.

4. RECOMMENDATIONS

4.1 Foundation Design

4.1.1 General

Based on our evaluation of technical and economic feasibility, we recommend that piles bearing on the glacial till and/or bedrock should be used to support the proposed structure. Although caissons are also technically feasible, our evaluations show that piles are more economical considering the building loads and the design of basement structural floor system that has been developed by Aberjona Engineering. However, because of Renaissance Properties' concerns with the possible noise and ground vibrations that may be caused by pile driving, recommendations are provided in the following sections of this report for both options.

4.1.2 Pile Design and Installation

Based on our evaluation of various types of piles, we recommend that square precast prestressed concrete piles as the most economical type of piles for this project. The optimal pile size would be a 14-inch square pile with a nominal maximum allowable capacity of 134 tons. However, concrete-filled steel pipe piles and H-piles with similar capacities are also technically feasible, and the final choice of pile type should be left to the pile contractor.

Based on the subsurface conditions encountered in Boring B2A, we estimate that the tips of the piles will meet refusal within the glacial till, the top of which is at approximately El. -111 which is approximately 124 feet below the existing ground surface. However, the elevation of the top of the till and the depth of pile penetration into the till may vary within the site. Assuming that the piles will be driven from the bottom of the general site excavation at approximate El. +3 (see Section 4.5, Excavation and Dewatering), we estimate that the pile lengths required will be on the order of 120 feet to 130 feet. For precast concrete piles, these lengths would entail providing a mechanical splice of two precast sections to make up the full length of pile.

For the column loads that have been provided by Aberjona Engineering, an allowable pile load capacity of 134 tons would imply that most columns would be supported by either one or two piles. Because of the basement slab and the grade beams that will structurally connect the pile caps together, this provides adequate lateral restraint for the piles and columns so that they are not considered to be isolated. Thus, the provision of a minimum of three piles per pile cap which would otherwise be required by the Massachusetts Building Code Section 732.4 is not applicable for this design. The structural design of the pile caps should consider up to 3 inches of off-center

deviation in the position of the piles in any horizontal direction. If greater deviations should occur during actual pile installation, a redesign of the pile caps and grade beams may be necessary.

For pile caps with more than one pile, the minimum center to center spacing between any two concrete piles should be no less than 2.5 times the square root of the cross-sectional area at the pile butt, or 30 inches, whichever is less (in accordance with Sections 732.2 and 7.36.5 of the Massachusetts State Building Code).

Settlement of the piles under the design loads are generally expected to be 1 inch or less. Allowances for this magnitude of settlement should be considered in the design.

To minimize the volumetric displacement caused by pile driving and the resulting heave that may occur in adjacent foundations, we recommend that the piles be predrilled to El. -60 BCB prior to driving. The size of the predrilled hole should be slightly smaller than the pile size. This measure will also reduce somewhat the duration of pile driving noise and the duration and intensity of the ground vibration.

A pile load test in accordance with the Massachusetts State Building Code Section 722.0 is required for at least one of the piles.

4.1.3 Caisson Design and Installation

The bearing stratum for the caissons is the silty clay layer, the top of which is at approximately El. -22 to El. -26. It is our opinion that the bells of the caissons cannot be formed in the organic silt above the silty clay because of a sand layer between the silt and the clay which would lead to a large inflow of water during excavation of the bells. In consideration of this, we recommend that an allowable net bearing pressure of 2 tons per square foot be used in the design.

The net bearing pressure at the base of a caisson is calculated by dividing the net loads on the caisson base by the area of the caisson base. The net loads are derived from the building loads plus the total weight of the pier minus the total weight of excavated soil. For design, we recommend that a value of 50 pcf be used as the difference in total unit weight between the caisson and excavated soil.

We recommend that the locations, sizes and the depths of the caissons should be designed in accordance with the following criteria:

1. The bottom of the caisson shaft should be planned to extend at least 0.5 feet below the top of the silty clay layer.

2. The minimum diameter of the caisson shaft (and bell) should be 3 feet. Larger shaft sizes should be used if needed.

3. The maximum size of the bell should be 12 feet in diameter under normal circumstances. This is the maximum size that can be machine excavated by local foundation contractors. Larger bell sizes could be used, but they probably would have to be enlarged from 12 feet in diameter to final size using expensive hand excavation.

4. The bell diameter should not exceed 2.5 times the shaft diameter.

5. The flare angle of the bell should be 30° from the vertical. The vertical side at the outer bottom edge of the bell should be at least 4 inches high.

6. The bell of the caisson should not extend more than 5 feet below the top of silty clay.

7. The edges of the bells of any two adjacent caissons (including existing caissons for the adjacent building at 30 Garrison Street) should be offset from each other by at least 1 foot.

8. For any two adjacent caissons, the base elevations of the caissons should be such that the line between the bottom edge of one caisson and the other is 2H:1V or flatter.

9. There should be at least a 1 foot, and preferably a 2 foot, clearance between the side of the existing 30 Garrison Street building and the side of any caisson shaft. This will reduce the possibility of damage to the existing building during caisson construction.

To meet the above criteria, it may be necessary or desirable to install two or more smaller caissons rather than a single large caisson to support some of the larger column loads. These smaller caissons probably would have to be offset symmetrically from the center of the column location. We estimate the settlements of the most heavily loaded building columns will be on the order of 1 1/2 to 2 inches. We estimate that a substantial part of this settlement will occur during construction as the dead load is added. However, we estimate that post-construction settlements of about 1/2 inch to 1 inch could occur. We estimate that the maximum post-construction differential settlement between caissons will be about 3/4 inch. We recommend that structural details that will accommodate possible settlements of this magnitude be incorporated into the design.

In accordance with Section 731.6 of the Massachusetts Building Code, the bearing surface at the bottom of each caisson must be observed and tested by a qualified engineer to verify that the subgrade is undisturbed and has adequate compressive strength to support the design bearing pressure. We recommend that the shaft diameter of drilled caissons be a minimum of 3 feet to allow sufficient space for an engineer to inspect the bearing soil. Temporary steel casing must be used to prevent caving of the walls of the hole during installation and inspection. We recommend that the inspector be a geotechnical engineer experienced in the design and construction of drilled caissons. Should the subgrade strength be inadequate, field adjustment of the depth and/or bell diameter and/or load capacity of the caisson may be required.

The organic soils (consisting of peat and organic silt) and the underlying silty clay could be fairly permeable due to the presence of sand lenses and layers, as observed in the boring samples. If ground water inflow occurs, the flow into the excavation must be collected and removed to prevent softening of the clay bearing stratum. This is typically accomplished by sump pumps or by submersible pumps if the inflow volume is great. If water inflow occurs, then laborers preparing the base of the caisson should work from planks to minimize disturbance of the clay.

4.2 Lateral Earth Pressures/Seismic Design

The basement wall should be designed to withstand a lateral earth pressure corresponding to an equivalent fluid density of 90 pcf. An additional load due to earthquake should be computed in accordance with the Massachusetts State Building Code Section 716.6.10, using a total unit weight γ_t = 120 pcf.

The site is classified as a Class B site for earthquake design in accordance with the Massachusetts State Building Code Section 716.4.1. A soil factor S equal to 1.5 should be used in the base shear calculation.

It is recommended that the design water level should be set at El. +12 when considering uplift on the basement slab. Although the maximum past ground water levels that have been recorded at the site is at approximately El. +10 (BCB) (See Section 3.4), we believe that the higher design level is prudent to account for possible future high water level conditions.

We recommend that the basement slab and basement walls should be made waterproof. The type of waterproofing depends on the level of performance desired for the intended use of the subsurface space as a parking garage. If some dampness of the basement walls is tolerable, minimal waterproofing consisting

of waterstops at all joints and use of a low permeability concrete mix may be adequate. If a higher level of waterproofing is desired, bentonite panels or a membrane waterproofing system may be incorporated under the basement slab, grade beams and along the walls up to El. +12 BCB.

4.4 Frost Protection

We understand that Renaissance Properties is in the process of deciding whether or not the basement garage should be heated in the winter. If the basement garage is not heated, there may be problems with freezing of the ground water and soils under the basement slab and up around the lower portion of the basement walls, since the ground water is generally at or above the elevation of the basement floor. However, the depth of frost penetration in the covered garage would not be as severe compared to a situation with open exposure to the elements.

To mitigate the potential problems due to frost, we recommend that the bottoms of the pile caps and grade beams should be designed to be at least 3 feet below the top of the basement slab. The outside of the basement walls up to El. +12 (BCB) should be insulated to reduce the transmission of freezing temperatures to the soil. In addition, one of the following measures should be considered:

1. Insulate the bottom of the structural basement slab and the sides and bottoms of the grade beams and pile caps to reduce the transmission of freezing temperatures to the soil.

2. Replace the fill soils underneath the floor slab for a minimum depth of 3 feet with a clean free-draining gravel. Also provide at least 1 foot of free-draining gravel beneath the grade beams and pile caps. The gravel underneath the slab should be continuous with and be hydraulically connected to the gravel underneath the grade beams and pile caps. These details would provide drainage of water so that as the soil and water freezes, the freezing front will push the excess water downward instead of producing upward ice expansion pressures on the basement slab.

4.5 Excavation Support and Dewatering

4.5.1 General

It is anticipated that a general excavation to approximately El. +2 to El. +3 (BCB) may be necessary to construct the grade beams and pile caps at the site. Since the existing ground surface is generally at El. +13 to +14, the excavation would be approximately 10 feet to 11 feet deep in most areas and the bottom of the excavation would be within the fill stratum. It is our assessment that excavation to such a level is feasible and will not cause any instability or bottom heave of the organic soils below the fill at the site. If excavations to greater depths are required, we recommend that the excavations be restricted in horizontal dimension to minimize any potential problems with overall excavation stability. Since the ground water level at the site may be expected to vary from approximately El. +8 to El. +10 (BCB), excavations to El. +2 or El. +3 (BCB) will require dewatering of the site.

Schematics of the site constraints that should be considered in the excavation design are illustrated in Figs. 4 through 7. A discussion of these constraints follows below.

It should be noted that the dimensions and elevations of existing and proposed structures and the locations of underground utilities are schematic representations based on limited data available at the present time. All dimensions, elevations and locations should be verified during the design of the excavation support system and/or during construction. We especially recommend obtaining detailed as-built drawings of the structure at 30 Garrison Street and further verifying the locations and elevations of underground utilities under the north alleyway.

4.5.2 North Side

Fig. 4 shows a cross-section through the north side of the proposed building. Along the north alley, the ground surface elevation varies from approximately El. +14 to El. +18. Some regrading of the ground surface will be required to accommodate the planned garage exit/entry ramp shown in Fig. 4. The major consideration for excavation along the north alley is the presence of underground utilities in this alley. As indicated by the Property and Topographic Plan prepared by Allen, Demurjian, Major & Nitsch dated September 1987, in addition to the sewer pipe shown in Fig. 4, there are also electrical, Cable TV and telephone conduits buried in the area, the elevations of which are not indicated on the plan.

4.5.3 West Side

Fig. 5 shows a cross-section through the proposed building along the west alley which is the driveway for the adjacent Follen Street residences. Based on available information, there is only one buried utility in this area, i.e., the sewer pipe running roughly north to south, but which crosses the property line. This sewer line will have to be removed and perhaps relocated during construction.

4.5.4 South Side

The south side of the excavation is bounded by MBTA Southwest Corridor Structure as shown in Fig. 6. There is approximately 7 to 10 feet between the project property line and the wall of the Southwest Corridor Structure. Since the bottom of the wall is founded in the silty clay, the wall acts as an effective seepage cutoff along this side of the excavation. Assuming that a temporary construction easement can be obtained, excavation can proceed right up to this wall.

4.5.5 East Side

The east side of the excavation is adjacent to the 30 Garrison Street Building presently under construction. The structure is founded on caissons with grade beams (at some locations) and a slab on grade. The major consideration along this side of the excavation is to prevent water inflow from washing out the soils from underneath the slab on grade. In addition, lowering of the ground water table should be prevented since this could lead to settlements within the organic silt layer which could also disrupt the slab on grade.

Note that construction records indicate that the bells of some of the caissons under 30 Garrison Street may extend into the 32 Garrison Street property. The maximum extension into the 32 Garrison Street property line appears to be about 6 inches. The caisson locations should be verified from a review of final as-built drawings of 30 Garrison Street. To avoid damaging the 30 Garrison caissons, sheet piles should not be driven with offsets less than 1 foot from the property line.

4.5.6 Recommended Excavation Design

Given the constraints discussed above, we recommend performing the excavation using steel sheet piles. Although we also evaluated the possibility of performing an open cut sloped excavation along the north and west alleyways, we do not recommend this option. Dewatering of an open cut excavation would require the use of a wellpoint system and would result in temporary lowering of the local ground water levels. Lowered ground water levels are a concern because of the

possible deterioration of wood piles under adjacent structures that may result from exposure of the tops of the piles to air. Though it is unlikely that temporary dewatering would cause significant deterioration, we believe it is prudent to avoid such a condition. Also, considering the cost of operating a wellpoint system, a sheet pile excavation may also be more economical.

Sheet piles should be installed along the east, north, and west sides of the site, but it is not necessary to install them along the Southwest Corridor structure along the south side of the site. However, the line of sheet piles installed along 30 Garrison Street and the west alleyway should extend right up to and butt against the Southwest Corridor structure in order to facilitate seepage control at the joint between the sheet piles and the Southwest Corridor structure.

The steel sheet piles should be installed to extend below the fill at the site and penetrate into the underlying organic silt a sufficient depth to provide a cutoff for ground water. The depth of penetration should be selected considering that layers and lenses of relatively more pervious sand may exist in the organic silt. In addition, vertical loading of the sheet piles through friction from the soil and any loads from tieback anchors should be taken into account. This consideration may necessitate driving the sheet piles deeper to bear in the silty clay stratum especially if inclined tiebacks are used.

We recommend that the steel sheet pile system should be supported or braced using a combination of berm and rakers and/or tieback anchors. A system of berms and rakers would probably be necessary along the 30 Garrison Street side, whereas tieback anchors can be employed along the west alley/driveway. Tiebacks may be feasible along the north alley if they do not cause interference with the underground utilities in the area. Depending on the excavation levels as required by the final building design and the easements that may be obtained along the alleys, it may be possible to install sheet piles with a sloped cut in back of the sheet piles. This could conceivably lead to a cantilevered sheet pile design which would not require tiebacks or rakers along the alleyways. However, it should be noted that larger ground movement would also result, and this may cause some movements of buried utilities under the alleyways.

Although steel sheet piling will provide a cutoff against ground water seepage into the excavation, some seepage can still be expected to occur. This seepage and any rainfall that occurs should be collected and pumped out of the excavation by an appropriate arrangement of collecting ditches and sump-pits. Recharge of the ground water levels outside the excavation may also be required.

4.6 Easements and Offsets from the Property Lines

The limits of the proposed underground structure can extend to the limits of the property line, except for the boundary adjacent to 30 Garrison Street. At the 30 Garrison Street boundary, we recommend a 3.5 foot offset from the exterior garage wall of the proposed building to the property line to allow for working room required to install sheet piles for excavation. If temporary construction easements along the rest of the property lines cannot be obtained, then offsets from the property limits may also be required.

4.7 Geotechnical Instrumentation

We recommend that survey reference points should be established to monitor and document settlements and lateral movements of the steel sheet piles and adjacent structures. A pre-construction survey should be performed and crack gages should be installed on any existing cracks in buildings adjacent to the site. It may also be advisable to install vibration monitoring sensors at the site and in some of the adjacent buildings during pile driving. Several ground water observation wells should be installed around the site to monitor any temporary changes in ground water levels during excavation and dewatering.

E. PROOF OF OWNERSHIP

Proof of Ownership
Deed Conveyed to First Church of Christ Scientist

8479 701

HAYES-BICKFORD LUNCH SYSTEM, INC.

a corporation duly established under the laws of Massachusetts

and having its usual place of business at One Gateway Center, Newton

, Middlesex County, Massachusetts, for consideration paid,

of Two Hundred Fifty Thousand ($250,000) Dollars

grants to The First Church of Christ, Scientist, in Boston, Massachusetts

of with quitclaim covenants

xxxxxxxx

[Description and encumbrances, if any]

A certain parcel of land with the buildings thereon situated in Boston, Suffolk County, Massachusetts, being shown on a plan made by Aspinwall & Lincoln, C.E., dated August 20, 1931, recorded with Suffolk Deeds on September 11, 1931. Said parcel is bounded and described as follows:

Northwesterly	by the southeasterly end of Garrison Street and by the southeasterly line of Alley No. 454 as shown on said plan, one hundred seventy-eight and 71/100 (178.71) feet;
Southwesterly	by the northeasterly line of a passageway shown on said plan, one hundred sixty-four (164) feet;
Southeasterly	by land of the Boston and Providence Railroad Corporation, one hundred seventy-eight and 95/100 (178.95) feet;
Northeasterly	by land designated on said plan as land now or formerly of F. H. Roberts Co., being land now of A. W. Perry, Inc., in part running through the middle of a sixteen (16) inch wall as shown on said plan, sixty-seven and 76/100 (67.76) feet;
Northwesterly	by said last mentioned land, thirty-one one-hundredths (.31) of a foot;
Northeasterly	by said last mentioned land on a line running through the middle of a twenty (20) inch wall and continuing to the end of said Garrison Street as shown on said plan, ninety-six and 24/100 (96.24) feet.

Containing 29,328 square feet according to said plan.

Together with full rights of way in common with others entitled thereto in and over the above mentioned alley and passageway. Being the premises conveyed to Hayes-Bickford Lunch System, Inc., by A. W. Perry, Inc., by deed dated September 11, 1931 and recorded with Suffolk Deeds in Book 5280, Page 477.

Said premises are conveyed with the benefit of and subject to said easements in regard to Party Walls and open areas set forth in said deed from A. W. Perry, Inc., to the Hayes-Bickford Lunch System, Inc., dated September 11, 1931.

Said premises are also conveyed subject to real estate taxes of the City of Boston assessed as of January 1, 1971, and to restrictions of record so far as now in full force and applicable.

F. PLANS, SECTIONS AND ELEVATIONS

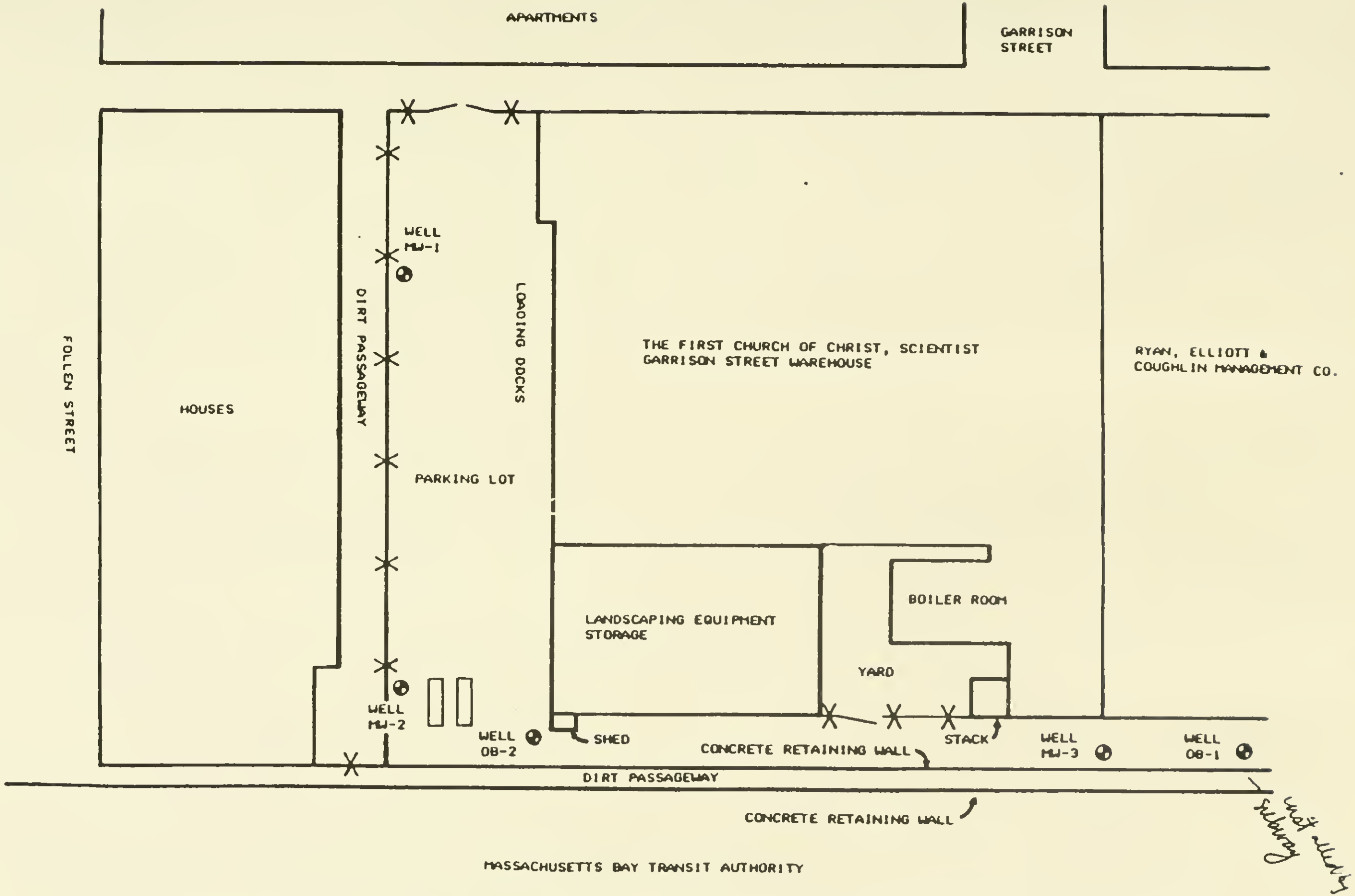
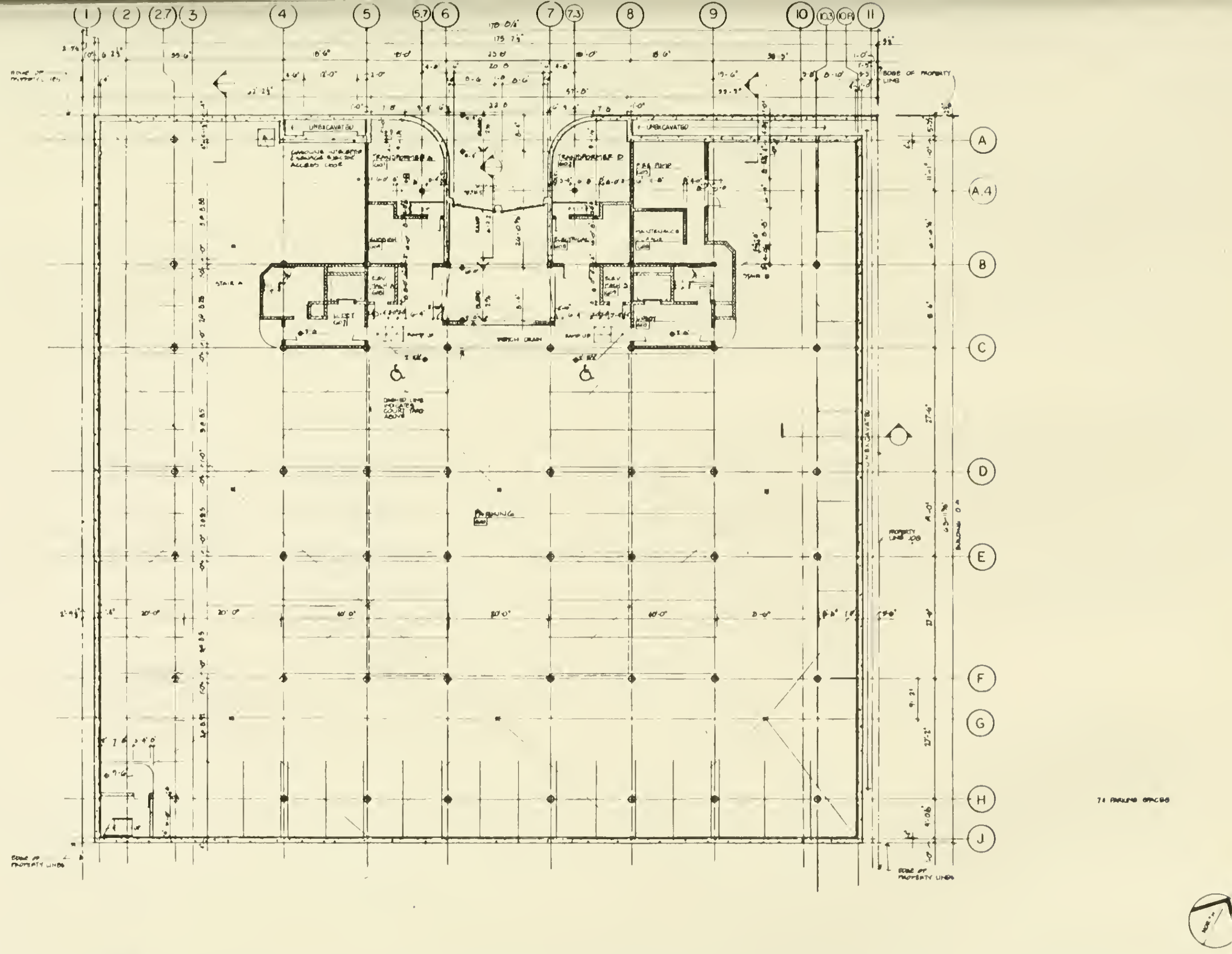


Figure 1: General site plan of 32 Garrison Street, Boston, Massachusetts. Not to scale.



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BOSTON, MASSACHUSETTS

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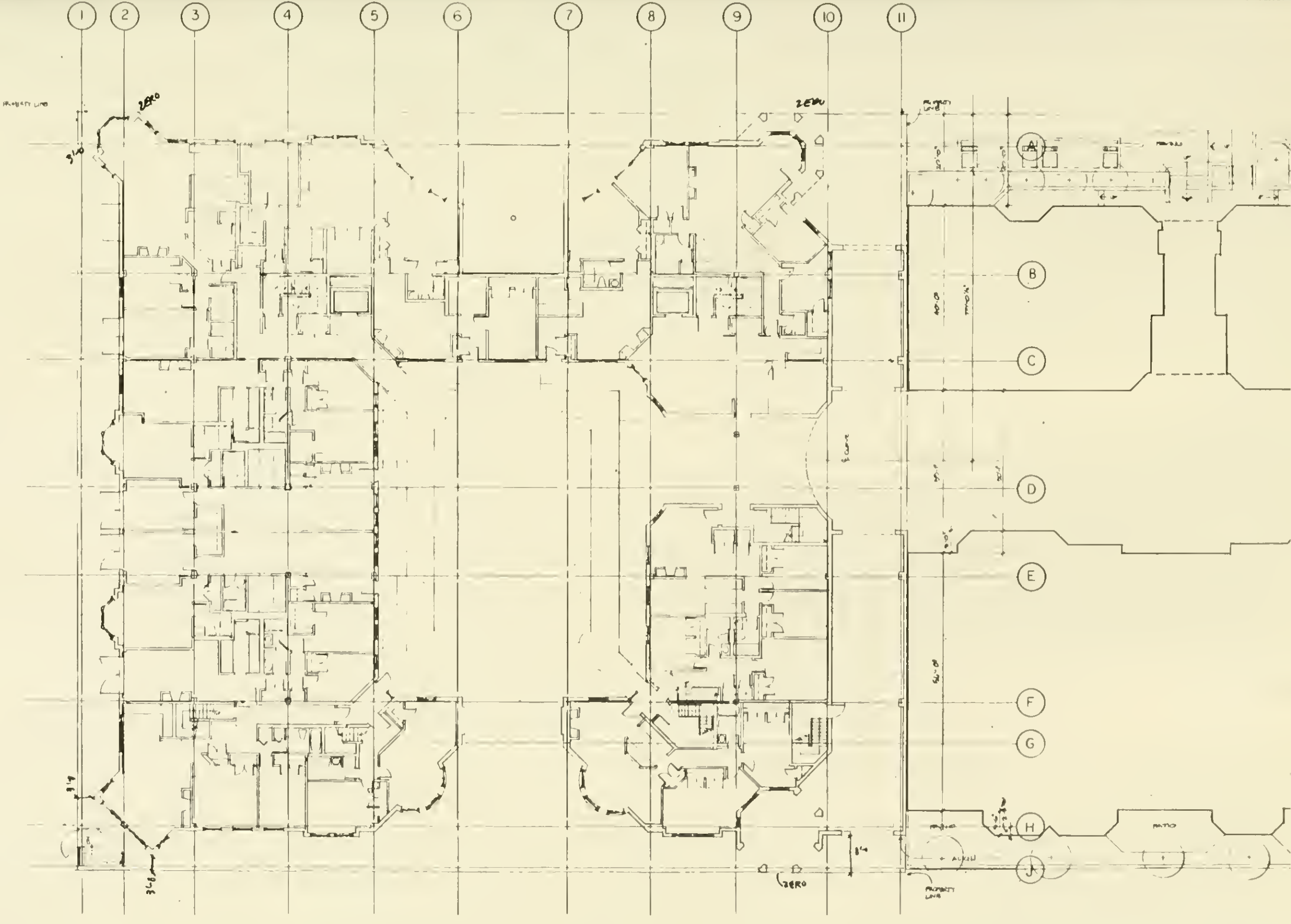
Drawn By		
Checked By		



DIMENSIONS SENT TO
RE ATTORNEYS 12/10/87

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Job #
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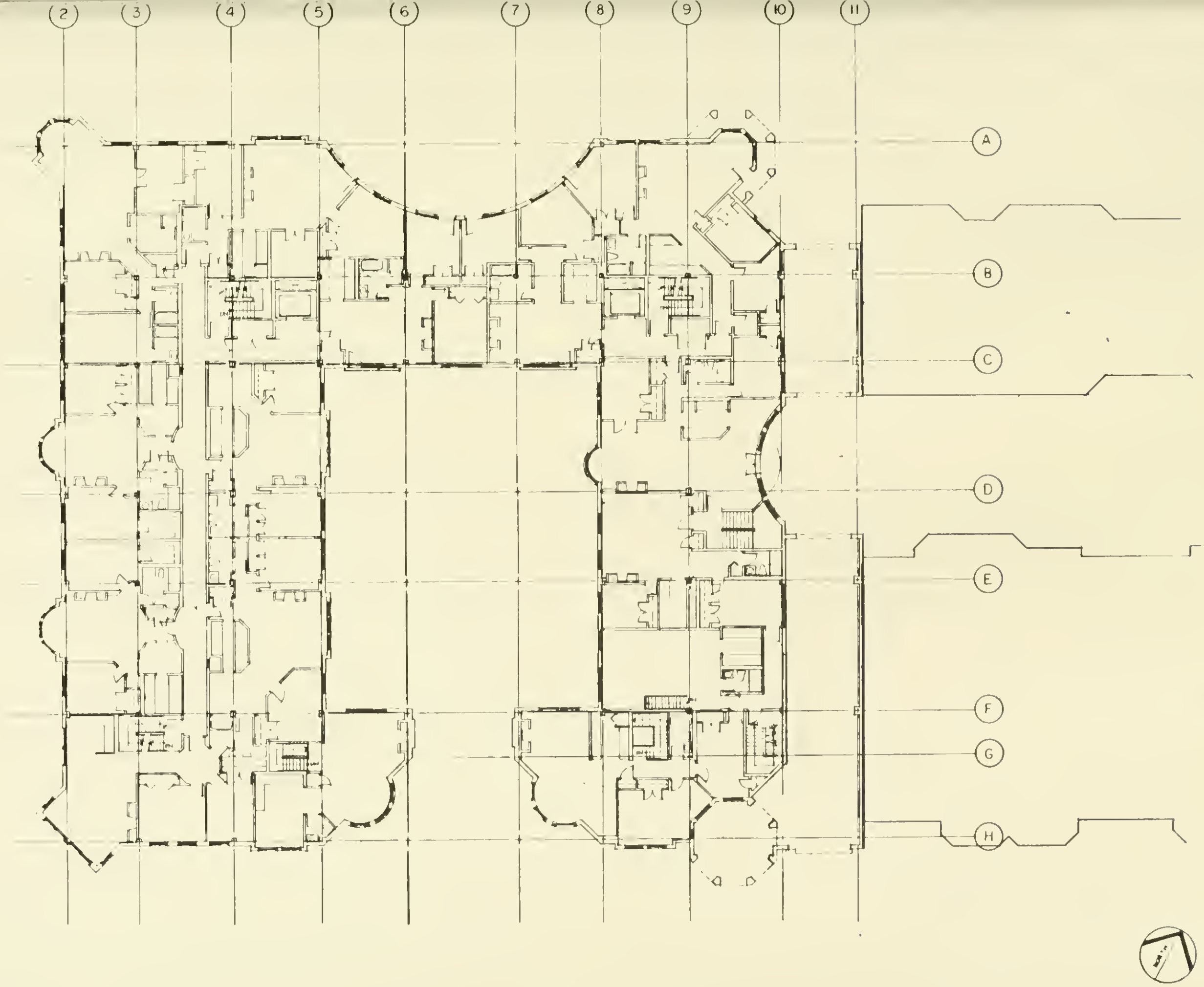
Sheet Title
FIRST FLOOR PLAN

CHECK SET

Sheet Number
12/18



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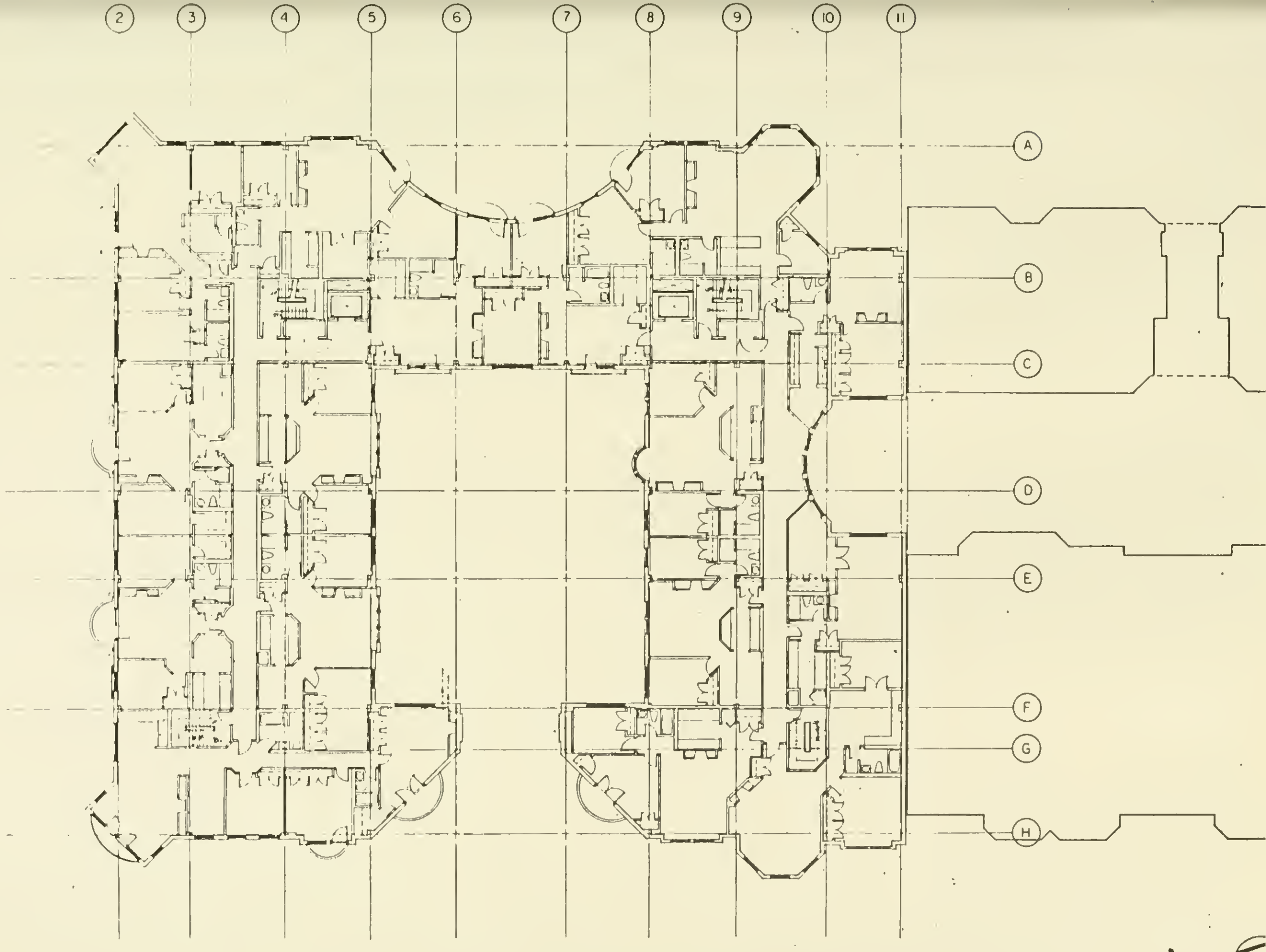
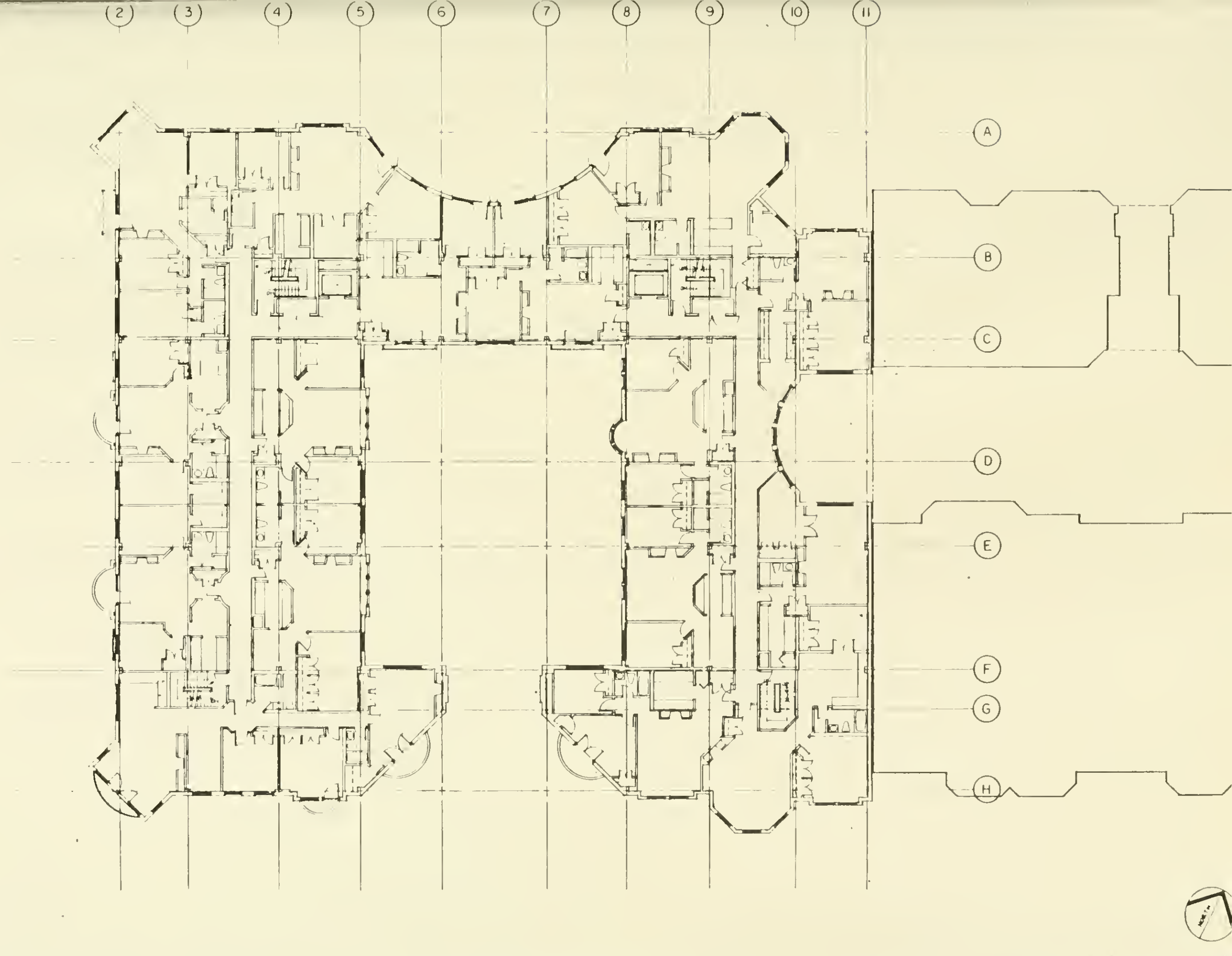


[illegible] Civil Engineer [illegible]	[illegible] Electrical Engineer [illegible]	Environmental Design Engineers Inc Mechanical Engineer [illegible] Portland St Boston, MA [illegible]	[illegible] Engineering Inc. Structural Engineer One [illegible] P.O. Box [illegible] [illegible], MA [illegible]	32 GARRISON STREET BOSTON, MASSACHUSETTS	Renaissance Properties Owner The Electric Carriage House [illegible] Columbus Ave. Boston, MA [illegible]	Notter Finegold + Alexander Inc. Architect 77 North Washington St. Boston, MA [illegible] [illegible]	3



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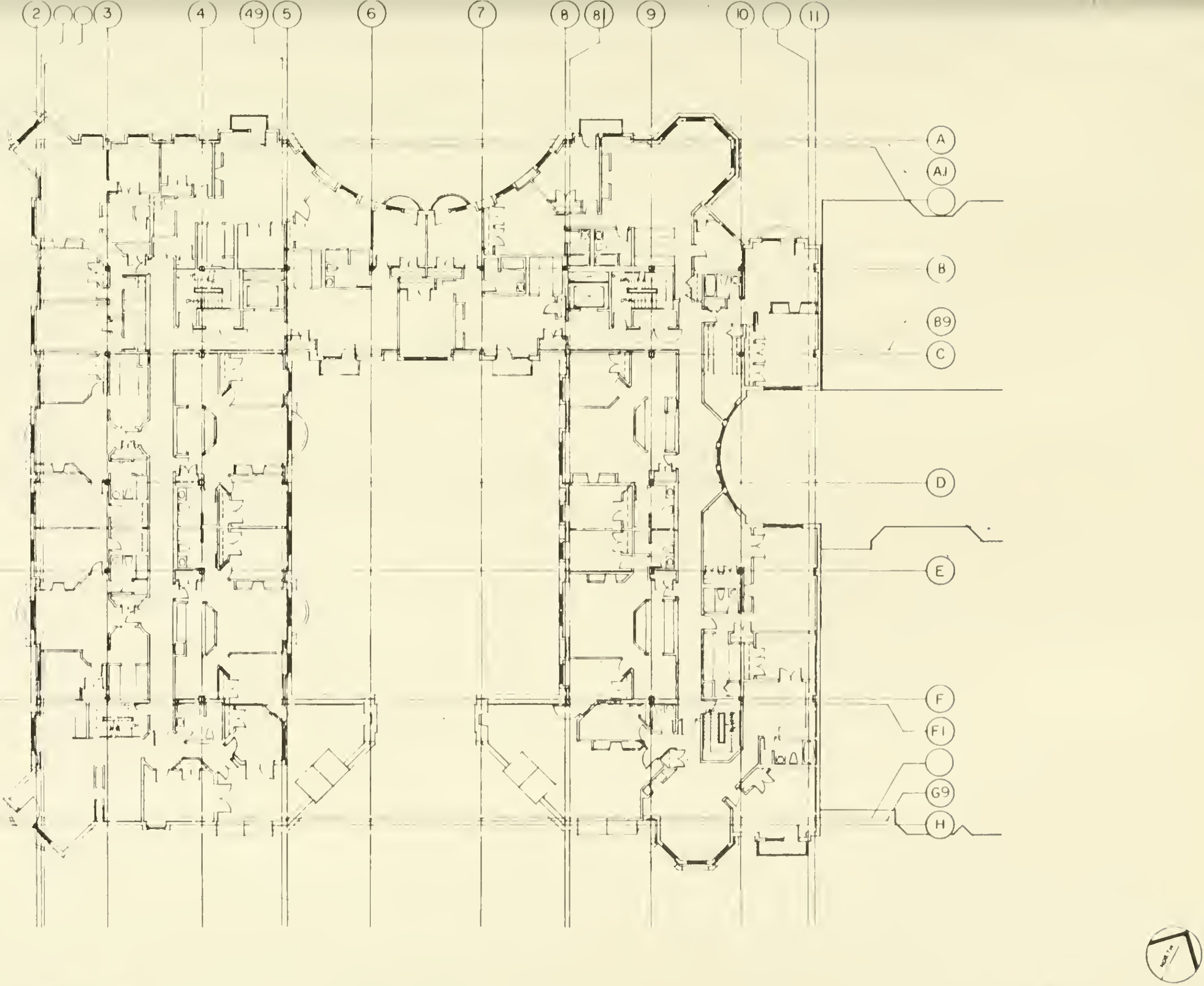

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[illegible] ENGINEERING INC.
Structural Engineer
One Mount Vernon St
P.O. Box 210
Winchester, MA 01890

32 GARRISON STREET
BOSTON, MASSACHUSETTS

RENAISSANCE PROPERTIES
Owner
The Electric Carriage House
281 Columbus Ave.
Boston, MA 02116-0114

NOTTER FINEGOLD + ALEXANDER INC.
Architects
77 North Washington St
Boston, MA 02113 0103
617 · 227 · 9272

Stamp

Job #	Revisions	Sheet Title
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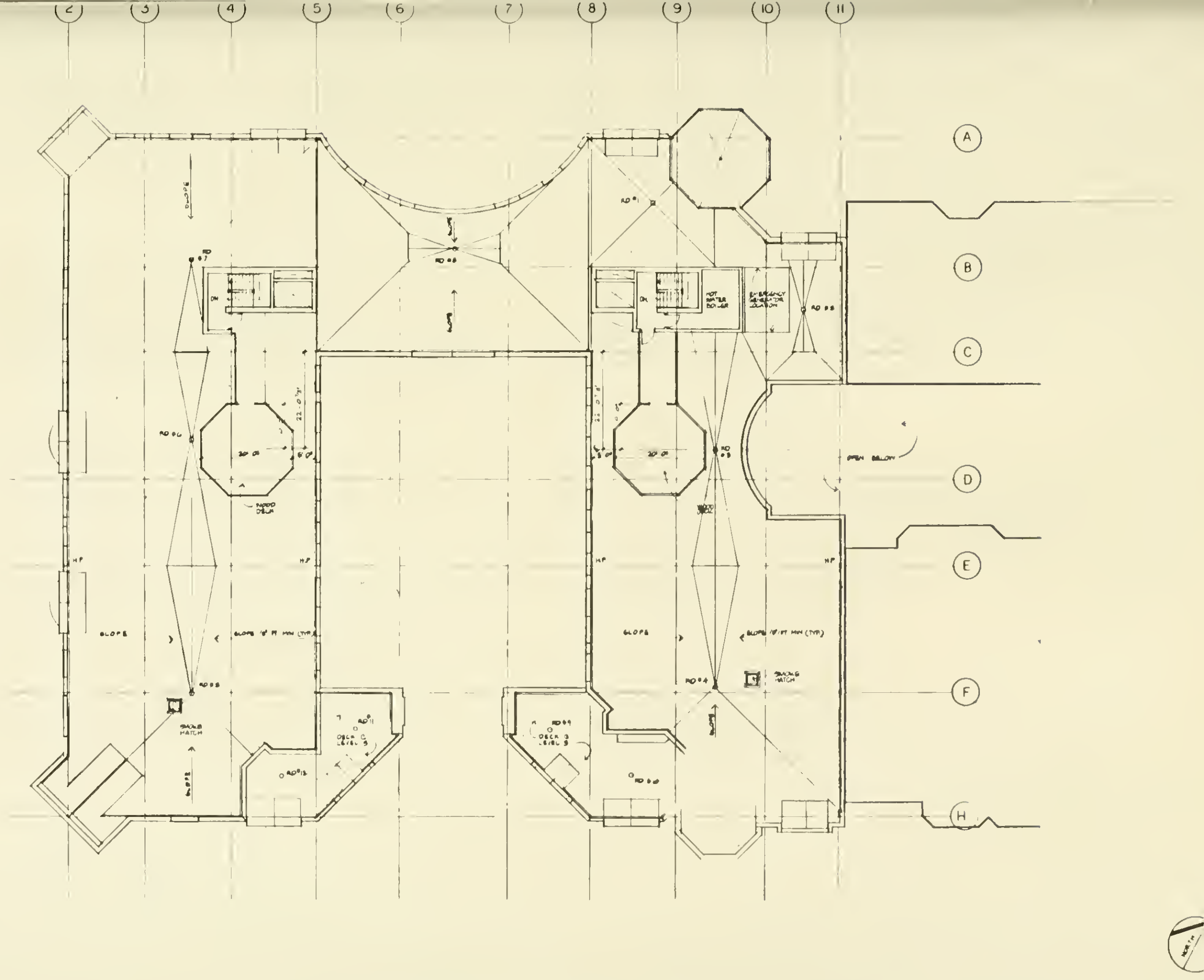
Date		
Drawn By		
Checked By		

Sheet Number



ALLEN, DEMURJIAN, MAJOR & NITSCH
Civil Engineer
131 Clarendon St
PO Box 250 Boston, MA 02117

VINCENT A. DIBIASE INC
Electrical Engineer
110 South St
Boston, MA 02111

ENVIRONMENTAL DESIGN ENGINEERS INC
Mechanical Engineer
140 Portland St
Boston, MA 02114

ABERRUNA ENGINEERING INC.
Structural Engineer
One Mount Vernon St
P.O. Box 516
Winchester, MA 01890

MASON AND FREY
Landscape Architect
140 Trapelo Rd.
Belmont, MA 02178

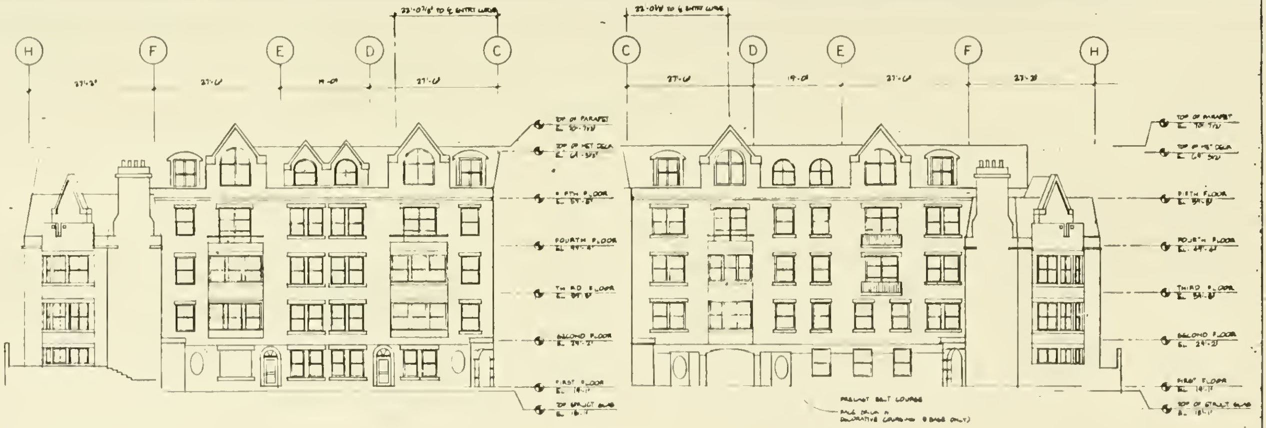
32 GARRISON STREET
BOSTON, MASSACHUSETTS

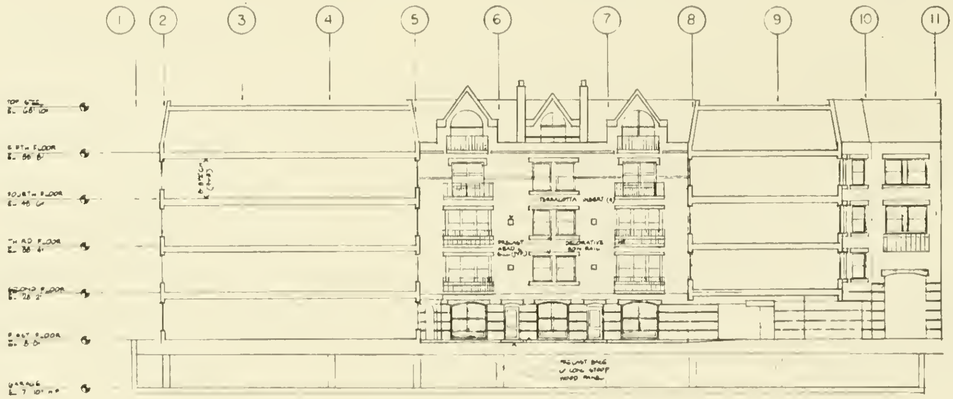
RENAISSANCE PROPERTIES
Owner
The Electric Carriage House
281 Columbus Ave.
Boston, MA 02116-5114

NOTTER FINEGOLD + ALEXANDER INC.
Architect
77 North Washington St
Boston, MA 02114 3103
617-227-9272
Stamp

Job #	Revisions
Scale 1/8" = 1'-0"	
Date	
Drawn By	
Checked By	

Sheet Title
ROOF PLAN





ALLEN, DEMURJIAN, MAJOR & NITSCH
Civil Engineer
121 Clarendon St
PO Box 250 Boston, MA 02117

VINCENT A. [illegible] INC
Electrical Engineer
110 South St
Boston MA 02111

ENVIRONMENTAL DESIGN ENGINEERS Inc
Mechanical Engineer
148 Portland St
Boston MA 02114

[illegible] ENGINEERING INC
Structural Engineer
One Mount Vernon St
P.O. Box 315
Winchester, MA 01890

MASON AND FREY
Landscape Architect
242 Trapelo Rd
Belmont, MA 02178

RENAISSANCE PROPERTIES
Owner
Ten Electric Carriage House
331 Columbus Ave
Boston, MA 02116-5114

NOTTER FINEGOLD + ALEXANDER INC.
Architect
77 North Washington St
Boston MA 02114 2103
617-227-9272

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Job #	Revisions	Sheet Title
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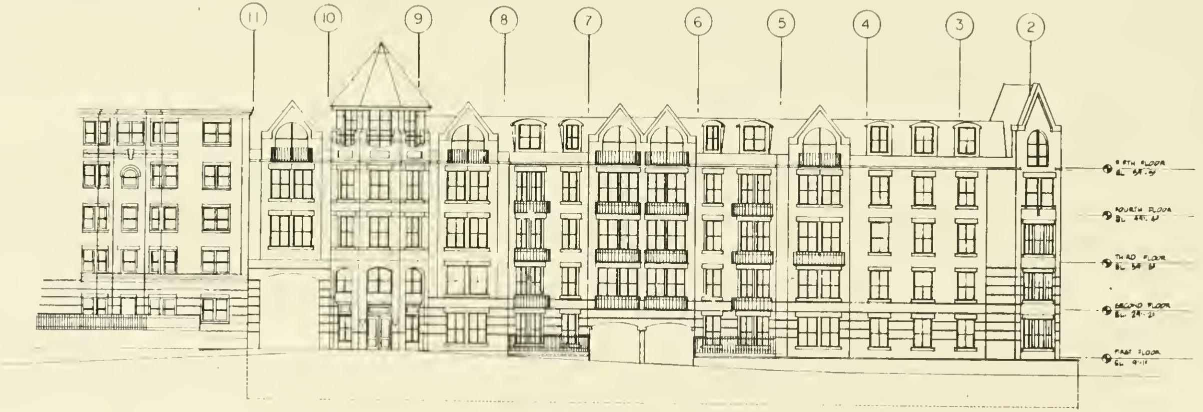
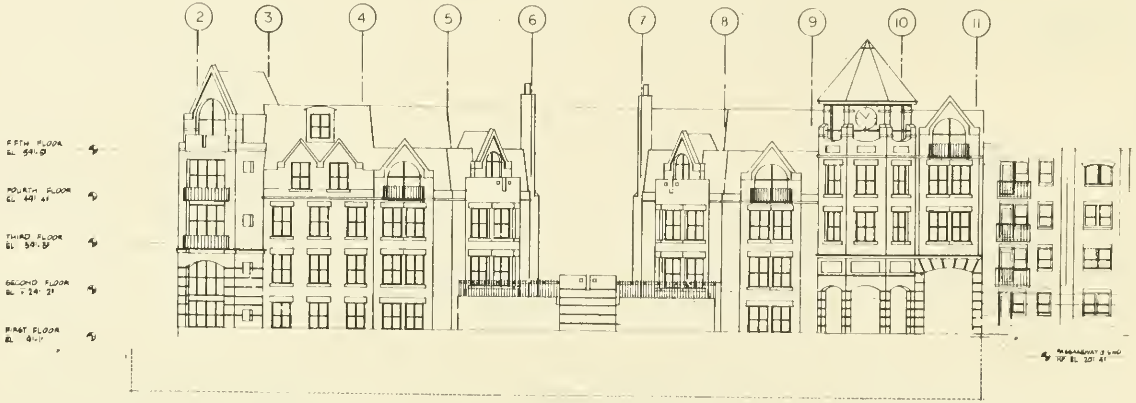
Sheet Number



GARRISON STREET ELEVATION



SOUTH WEST CORRIDOR ELEVATION

SHOOSHANIAN ENGINEERING ASSOC INC
Civil Engineer
330 Congress St
Boston, MA 02210

VINCENT A [illegible] I.E.
Electrical Engineer
110 South St
Boston, MA 02111

ENVIRONMENTAL DESIGN ENGINEERS INC
Mechanical Engineer
142 Portland St
Boston, MA 02114

[illegible] ENGINEERING INC
Structural Engineer
One Mount Vernon St
P.O. Box 316
Winchester, MA 01890

MASON AND FREY
Landscape Architect
242 Trapelo Rd
Belmont, MA 02178

32 GARRISON STREET
BOSTON, MASSACHUSETTS

RENAISSANCE PROPERTIES
Owner
The Electric Carriage House
331 Columbus Ave
Boston, MA 02116-6114

NOTTER FINEGOLD + ALEXANDER INC.
Architect
77 North Washington St
Boston, MA 02114 2163
617-227-9272
Stamp

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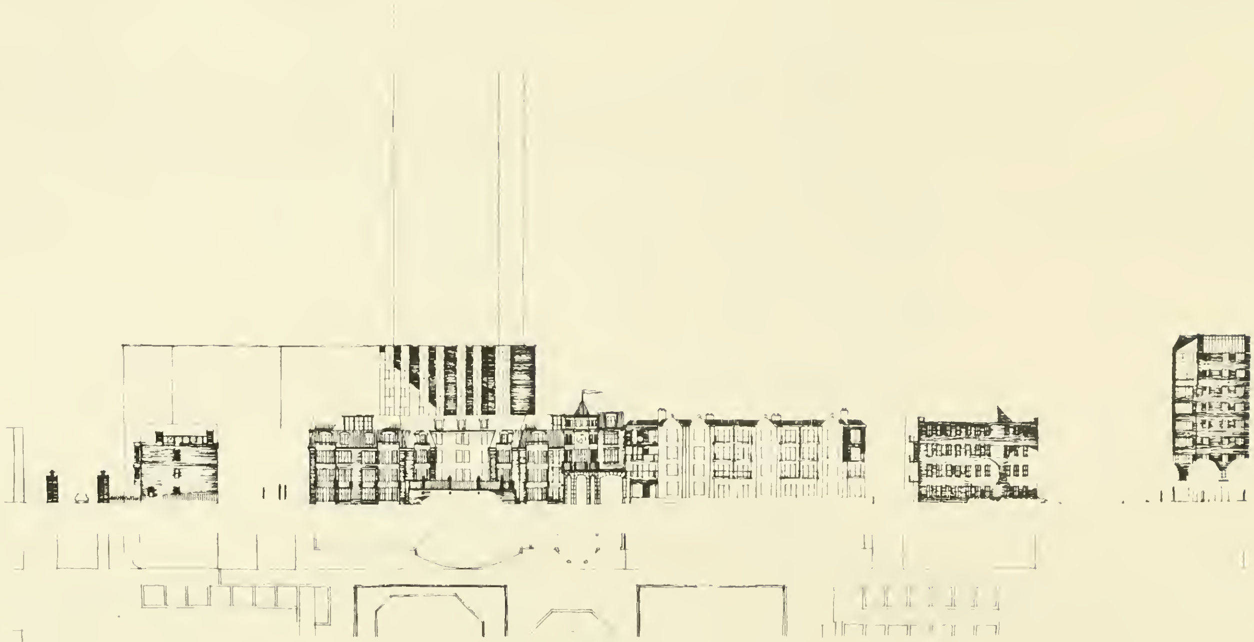

ELEVATION
AT
SOUTHWEST
CORRIDOR

· 32 GARRISON STREET ·

NOTTER FINEGOLD +
ALEXANDER

1987

scale: 1"=20'-0

Boston Shakespeare Company
Theatre

SO END
G241
1987
RENAISSANCE PROP.
LIBRARY

AUTHOR
32 GARRISON STREET, BOSTON

TITLE

DATE LOANED	BORROWER'S NAME

053 21

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